

AR78

Wingspear Business Reference Library  
University of Alberta  
1-18 Business Building  
Edmonton, Alberta T6A 6K6

# NOVA CHEMICALS

*A Commodity Chemical Company*

2002 Annual Report

## FINANCIAL HIGHLIGHTS

(MILLIONS OF U.S. DOLLARS, EXCEPT PER SHARE DATA AND RATIOS)	2002	2001	2000
Revenue	<b>3,091</b>	3,194	3,916
Net income (loss) to common shareholders before unusual items <sup>(1)</sup>	<b>(106)</b>	(202)	287
Net income (loss) to common shareholders after unusual items <sup>(1)</sup>	<b>(112)</b>	(161)	266
Earnings (loss) per share before unusual items <sup>(1, 2)</sup>			
— Basic	<b>(1.24)</b>	(2.37)	3.23
— Diluted	<b>(1.24)</b>	(2.37)	3.06
Earnings (loss) per share after unusual items <sup>(1, 2)</sup>			
— Basic	<b>(1.30)</b>	(1.88)	3.00
— Diluted	<b>(1.30)</b>	(1.88)	2.84
Cash from operations	<b>359</b>	278	351
Plant, property and equipment additions	<b>71</b>	168	440
Total assets	<b>4,154</b>	4,359	4,754
Debt to total capitalization	<b>43.8%</b>	48.5%	42.9%
Return on average common equity <sup>(3)</sup>	<b>(10.4)%</b>	(16.5)%	21.2%

<sup>(1)</sup> Unusual items were \$(6) million in 2002, \$41 million in 2001, \$(21) million in 2000 (see page 53 of the Management Discussion and Analysis for a complete listing).

<sup>(2)</sup> 86 million weighted-average common shares outstanding in 2002, 85 million in 2001 and 89 million in 2000.

<sup>(3)</sup> Net income (loss) to common shareholders before unusual items divided by average common equity (excluding preferred securities and retractable preferred shares).

### Table of Contents:

p.2	Letter to Shareholders
p.7	Shareholder Value
p.8	Summary of Achievements
p.9	Opportunity is Where & When You Find It
p.16	Supplying the Market
p.17	Innovation is What You Make It
p.26	2002 Business Discussion

### 2002 Financial Review:

p.36	Management Discussion and Analysis
p.58	Consolidated Financial Report
p.65	Notes to Consolidated Financial Statements
p.94	Corporate Governance
p.96	Executive Leadership Team
p.98	Board of Directors
p.100	Responsible Care

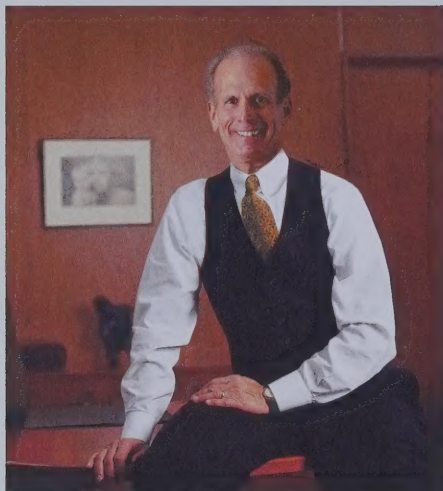
We are a commodity chemical company.

Our strength lies in our understanding of the fundamentals of our business—and in our ability to leverage that understanding throughout the cycle.

The concept is simple, but the implementation is not. We compete in an arena with companies several times our size—and where they see constraints, we see opportunities.

We know that focus creates results. We believe that an organization that moves as one is powerful. We recognize that success comes from flawless execution. This combination of focus, alignment, and execution—not the size of our company—is our formula for success in commodity chemicals.





Jeffrey M. Lipton  
President and Chief Executive Officer

*"NOVA Chemicals' entire organization has proven that we understand what it takes to be successful in the highly cyclical and competitive commodity chemicals business. We have built a strategy, a set of policies and tactics that provide clear focus and priorities for everyone in the company."*

#### Fellow Shareholders,

In last year's letter I wrote that NOVA Chemicals' employees understand the cyclicity of the commodity chemical business and know they can continue to improve our company even in the worst of times. In 2002, they more than proved me right.

The past six quarters for most petrochemical producers have been the worst I've experienced since 1964, when I began working in the industry. Demand has been weak and customers have kept inventory levels abnormally low. The business segments that NOVA Chemicals works in operated at about 85% of theoretical capacity. At those utilization levels, customers have much more power than producers and force producers to sell at very low margins. The combination of low volumes and low margins in our capital-intensive industry generally leads to operating losses and low levels of cash flow. Two consecutive years in this kind of environment have had a big impact on the chemical industry. In general, balance sheets have weakened, investors have lost faith in the future of the industry, management teams have had their confidence shaken and growth plans have been put aside as companies focus on survival.

NOVA Chemicals, like the general industry, suffered from the extended downturn. We showed improvement from the previous year, but lost money in 2002 — \$106 million or \$1.24 per share before unusual items and \$112 million or \$1.30 per share including unusual items.

Although we reported large losses, I am prouder than ever to be associated with NOVA Chemicals, more so than any organization I've been part of at any time in my

career. We did a lot more than persevere in 2002. We substantially reduced our debt; continued investing in new products and technology to ensure profitable growth; enhanced our credibility with suppliers, customers, creditors and investors; maintained the focus and enthusiasm of our workforce and generally outperformed the industry in most important areas of our business that we can control. As a result, we continued to make strong progress towards our goal of being the best commodity chemical company in the world.

#### CASH FLOW

In July 2001, just as NOVA Chemicals was starting up major new ethylene and polyethylene facilities, we began preparing for a major cyclical downturn. Business and consumer confidence were declining, industrial production indices were falling sharply and inventories in our sector were relatively high. We immediately changed the focus for everyone in our company from maximizing short-term profits to generating cash flow.

As we reported, the second half of 2001 was the worst period we could have imagined. We began to see some gains in 2002. This improvement and our cash management efforts generated \$153 million more EBITDA in 2002 than 2001. We accomplished this despite a drop in revenue, because energy-related feedstock and utility costs fell more than product prices during the year.

Unlike some of our peers, we generated an extraordinary amount of cash from things we controlled. We cut fixed capital expenditures from \$168 million in 2001, to \$71 million in 2002. We were able to do this because we have new facilities at our Joffre, Alberta site and we have maintained the reliability of older plants at very high levels. We also sold our share of a non-strategic pipeline for \$64 million and sold other assets for about \$18 million.

Our most important effort resulted in a \$206 million reduction in operating working capital, while sales volumes increased 7%. This comes on top of a \$184 million operating working capital reduction in 2001. For eight years we have used a measure called cash flow cycle time (CFCT) to judge how much progress we make in improving the fundamentals of our operations. We believe we can maintain the highest levels of customer service by using information technology (IT) and employee creativity to work with less cash. CFCT is defined as the cash tied up in inventory and accounts receivable, less accounts payable. The amounts are calculated in days of sales to ensure improvements are real in both strong and weak parts of the cycle.

By year-end 2000, CFCT had been reduced to what we believe were relatively good levels at 60 days. As can be seen in fig. 4, on page 30, we have continued to reduce CFCT to 20 days by the end of 2002. We didn't just cut CFCT, we improved the way we work. We took on new customers and increased sales volume, while at the same time we sharply reduced inventories and sped up collection of receivables. We also worked closely with suppliers to extend payables. Over the long term, we expect to operate comfortably with CFCT in the 25 to 30 day range because we have learned to work in a new, more efficient way.



## COST REDUCTION

Our entire organization understands not only the cyclical nature of our business but also the need to reduce controllable costs in both good and bad times. We use all of the state-of-the-art tools to drive process improvement but none is as important as the company-wide realization that we must be the lowest-cost provider of every grade of every product we make. We all come to work with the clear understanding that cost reduction is an every-day part of our jobs. As a consequence, we start each business year with a 5% fixed-cost reduction target, and a mandate to improve our long-term competitive position at the same time. In 2002, we closed high-cost facilities, improved work processes in every aspect of our business and as shown in fig. 5, on page 31, we continued to get the job done.

## DEBT REDUCTION

Improved operating cash flows, cuts in capital spending, large working capital reductions, and cost improvements allowed NOVA Chemicals to reduce debt by \$307 million in 2002. We have other sizeable, non-strategic infrastructure assets to sell and our investment in Methanex has begun to generate significant cash flow from regular and special dividends. Creditors and investors have more confidence in our ability to weather a prolonged downturn and believe we will remain strong enough to take advantage of the opportunities that have been created by current economic uncertainty.

## INVESTMENTS FOR THE FUTURE

In the commodity chemical business, cash generation and cost reduction are necessary, but not sufficient for generating strong returns for shareholders.

Our efficiency improvements have allowed us to sharply reduce total fixed costs and at the same time, increase our research and development expenditures. That investment has been rewarding. Our new ethylene cracker in Alberta is the world's largest and most energy-efficient and has operated at about 112% of its rated capacity. The new Advanced SCLAIRTECH technology polyethylene plant is operating well and has produced a series of high-value polyethylene products that have been rapidly accepted by demanding North American and European customers. In styrenic polymers, we have developed a range of new, higher margin products that we target to generate 30% of our sales volume by 2005.

We also continue to invest heavily in IT programs that will keep us at the forefront of our industry. In 2002, IT tools allowed NOVA Chemicals to pare down product lines and reduce inventories, while improving customer service and margins. They also allowed us to speed up receivable collections and improve logistical support for customers working with lean inventories.

NOVA Chemicals has proven we are good at cost reduction and at minimizing the use of shareholder capital. We are also making value-adding investments for profitable growth.

## MARKET CONDITIONS

Because our products are used for basic things like food packaging and home products, analysts have long assumed our fortunes track gross domestic product (GDP). We have learned however, that our net income tracks the U.S. Industrial Production (IP) Index quite closely. As shown in fig. 8, on page 32, the IP Index declined considerably more than GDP in 2001 and 2002. Also on page 32, fig. 9 shows the historical correlation of NOVA Chemicals' earnings and the IP Index. Both improved in the first three quarters of 2002 and fell in the fourth quarter. Most economists expect industrial production to recover and outpace GDP growth by the second half of 2003. Of course, we would like to see the economy develop that way, but we will continue to focus on cash flow and debt reduction until recovery is clearly in place.

We can't predict what will happen in the Middle East and other volatile parts of the world, nor how those events might impact our feedstock costs and economic growth. We are, however, quite optimistic about the longer term. There is a commonly held view that supply/demand balances will shift in chemical producers' favor by 2004 to 2005. We show consultants' projections for our two major businesses in fig. 10 and fig. 11, on page 33. The story is similar in both the ethylene/polyethylene and styrene/polystyrene chains. We believe the very poor business conditions in 2001 and 2002, and the uncertainties associated with oil-producing nations, will keep global industry participants from investing in much new capacity. Demand for our products will continue to grow and shortages will eventually develop around the globe by 2004 or 2005. When the peak occurs, we will benefit from significantly increased production capacity, new high-margin products and lower controllable costs. Our leverage per share to the expected peak in our two basic product lines continues to be the strongest in the industry.

## INVESTOR RETURNS

We continue to operate every aspect of our business with investor interests in mind. As shown in fig. 2, on page 7, in every year of our existence, beginning in 1999, NOVA Chemicals' common stock has been among the best performers in our industry. That remained true in 2002, despite our poor earnings.

NOVA Chemicals' entire organization has proven that we understand what it takes to be successful in the highly cyclical and competitive commodity chemicals business. We have built a strategy, a set of policies and tactics that provide clear focus and priorities for everyone in the company. Our organization is highly integrated so that we can all act quickly, decisively and effectively. To make this happen, the leaders of our company must be open, clear and straightforward about everything we do, internally and externally. As a consequence, we welcome the new laws and demands of regulators and investors because they are consistent with the way we've chosen to run our business since our inception, and the way we expect to run it in the tough years and the good ones to come.



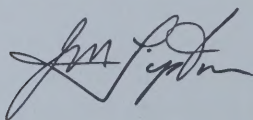
I, and all of the NOVA Chemicals employees who have worked through this downturn with enthusiasm and effectiveness, greatly appreciate the ongoing support of our suppliers, customers, Board of Directors, lenders and investors.

We expect 2003 will be a year of transition. It began with sharp increases in energy-related feedstock costs, and many economic uncertainties. Competitors in both of our businesses have announced significant plant closings. The mood throughout the chemical industry is quite solemn.

However, in the midst of our short-term concerns, there is a bit of optimism. North American industrial production has begun to grow and NOVA Chemicals' price initiatives seem to be taking hold. Full realization of these increases could not only cover feedstock cost escalation, but also expand margins. These developments, and the fact that inventories throughout our business chains appear quite low, could mean a sharp upturn in our earnings and cash flow if customers gain confidence in the economy and rebuild inventories to normal levels.

We will be ready to deal with both a continuation of difficult conditions and with the recovery, whenever it develops. I think NOVA Chemicals just might surprise investors with a significant rebound in 2003. After two very tough years, that's an opportunity we look forward to!

Sincerely,

A handwritten signature in black ink, appearing to read "Jm Lipton", with a stylized, cursive script.

Jeffrey M. Lipton  
*President and Chief Executive Officer*

February 14, 2003



## SHAREHOLDER VALUE

### SHARE PRICE PERFORMANCE—2002

NOVA Chemicals' share price decreased 5% in the U.S. on the New York Stock Exchange. This compares to an average 11% decline in peer chemical companies' share values, a 23% decline in the S&P 500 and a 14% decline in the S&P/TSX Composite.

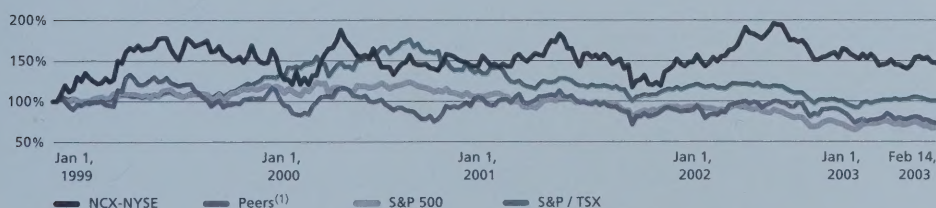
Fig. 1



### SHARE PRICE PERFORMANCE—1999 THROUGH FEBRUARY 2003

From January 1, 1999 through February 14, 2003, NOVA Chemicals' share price increased 47% on the New York Stock Exchange. This compares to an average 27% decline in peer chemical companies' share values and a 32% decline in the S&P 500. The S&P/TSX Composite was flat in this same period.

Fig. 2



(1) Peers include The Dow Chemical Company, Eastman Chemical Company, Lyondell Chemical Company, and Millennium Chemicals Inc.

### NOVA CHEMICALS' SHARE HISTORY

	2002	2001	2000
Dividends paid (Canadian dollars)	\$ 0.40	\$ 0.40	\$ 0.40
Market price (NYSE) (U.S. dollars)			
High	\$26.09	\$24.70	\$ 25 <sup>1</sup> / <sub>16</sub>
Low	\$18.14	\$14.86	\$ 15 <sup>3</sup> / <sub>16</sub>
Close	\$18.30	\$19.27	\$18 <sup>13</sup> / <sub>16</sub>
Market price (TSX) (Canadian dollars)			
High	\$40.15	\$37.90	\$37.20
Low	\$28.48	\$23.25	\$22.00
Close	\$28.89	\$30.75	\$28.10
Common dividend yield	1.4%	1.3%	1.4%
Shares outstanding			
Year-end (millions)	87	86	85
Average (millions)	86	85	89
Registered shareholders at year-end (thousands) <sup>(1)</sup>	14	19	20
Percentage of U.S. ownership <sup>(2)</sup>	28	27	9

(1) NOVA Chemicals estimates that 85% of the outstanding common shares are managed by institutional investors and 15% are owned directly by individual investors, including approximately 1% held by insiders.

(2) December 31, based on U.S. Securities and Exchange Commission filings as reported by Thomson Financial.

## 2002 SUMMARY OF ACHIEVEMENTS

*Based on NOVA Chemicals' Five-Point Business Strategy*

### FOCUS ON COMMODITY CHEMICALS

- Our employees maintained their energy, focus and confidence throughout difficult business conditions — allowing us to reduce debt by a total of \$307 million and preserve our strong balance sheet.

### INVEST ONLY FOR HIGH RETURNS

- We reduced capital spending by over \$90 million. We funded only those projects that were required to meet our Responsible Care needs, or were expected to generate in excess of our 16% return on investment.

### BUILD UPON AND ADD TO OUR SUSTAINABLE COMPETITIVE ADVANTAGE

- We signed a two-way license agreement with BP, granting NOVA Chemicals rights to use BP's Innovene Metallocene Technology. BP will use and sub-license our proprietary single-site catalysts. This agreement broadens our performance film portfolio, and creates opportunities for the sale of technology licenses for gas-phase polyethylene production.
- We commercialized 16 new polyethylene grades using Advanced SCLAIRTECH technology and exceeded our volume target of 400 mmlbs.
- The Styrenics business continued to drive high-margin growth initiatives. We expect 30% of our styrenic polymer volumes will be high-margin growth products by 2005.

### BE THE LOW-COST PROVIDER

- We reduced overall fixed costs by 9% per pound of polymer capacity and for the third straight year, achieved greater year-over-year percentage reductions.
- We reduced operating working capital by \$206 million, and reduced inventory-carrying costs as well as interest expense.

### BE AN INDUSTRY CONSOLIDATOR

- We improved our styrene monomer position by signing a long-term supply contract with BASF. This agreement supports the debottlenecking of our Bayport, Texas facility and provides our European Styrenics business with monomer at producer economics.
- We shut down polystyrene suspension reactors in Chesapeake, VA and Breda, the Netherlands — removing 100 mmlbs and 55 mmlbs, respectively, from the market. In addition, we idled 165 mmlbs of expandable polystyrene production at our Carrington, U.K. facility.
- We purchased Deltech Polymers Corporation's polystyrene and methyl methacrylate-styrene copolymers business in January 2003. We are supplying Deltech's customers from our existing capacity, as Deltech shut down its 140 mmlbs of production, removing about 2% of North American capacity.



# OPPORTUNITY IS WHERE & WHEN YOU FIND IT

## THE VALUE OF BUSINESS FUNDAMENTALS

The strength and sustainable value of our company is based on many things. We develop and deliver innovative products to new markets and new customers around the world. We also use technology to streamline processes and help us measure successes. Every day we work to drive

down costs and maximize efficiencies throughout our organization. Add all these up and you find that NOVA Chemicals is intensely focused on the fundamentals of our business. That's what keeps us strong and operationally fit in any business cycle.

A man with dark hair, wearing a white patterned shirt and a yellow tie, is sitting at a desk in an office. He is looking directly at the camera with a slight smile. His hands are resting on a folder or a stack of papers on the desk. The background shows a typical office environment with a computer monitor, various papers, and office supplies. The lighting is soft and professional.

## FIRST THINGS FIRST

*What it means to be in a commodity business*

There's one overwhelming reality in a commodity industry. A cycle dictates certain circumstances. You can't force the cycle, but you must improve the business and strengthen financial performance even when the cycle isn't going your way. We have demonstrated our capability to stay strong and remain prepared even in the toughest conditions. We are well positioned for the cycle's upturn, strengthened by a robust balance sheet, superior technology, and a clear-eyed focus on our core business.





## TURN ON A DIME

*The advantages created by a culture of responsiveness*

Our people make the difference. Speed to market, customer responsiveness and the ability to innovate are impossible without operational fitness. You can have a profound vision, the latest technology, and the shrewdest strategy, but it means nothing if your team can't focus on a goal, move in unison and take action.

We have that ability by virtue of exceptional organizational alignment and management focus. When you're able to get everyone in your organization thinking the same way—you can move as one.



## LEAVE NO STONE UNTURNED

*The relentless effort to reduce costs*

We measure everything that matters. To keep our balance sheet strong, we relentlessly “control the controllables.” We look for opportunities to improve our business and we deliver results. Our measurement systems are best in class and are an excellent indicator of fundamental work process improvement. Everyone in NOVA Chemicals knows what we can do, personally, to enhance business performance.

When markets are contracting, we stay ahead of the curve by continuously reducing debt and capital spending—so we can respond when things turn our way. We are not just taking emergency actions in tough times—we are continuously improving the way we operate our company.






## RESPECT THE CYCLE

*The art of preparation and execution*

Being in this business takes guts. We can't control the market, but we can control our ability to prepare and execute. Nobody does this better than we do.

We anticipate market demands, and rapidly respond to changing conditions. Everything about NOVA Chemicals—our people, our assets and management processes—is geared to maximizing and protecting shareholder value. We are a tightly-focused commodity chemical company with the highest leverage in the industry, making us well positioned for the economic recovery. When the market turns, our weaknesses become strengths, and it's then we realize our full potential.



*Standing from left: Jeffrey M. Lipton, Jack S. Mustoe, John L. Wheeler, Dale H. Spiess*

*Seated from left: Sheila H. O'Brien, A. Terence Poole, Larry A. MacDonald, Christopher D. Pappas*

## LEADERSHIP IS CRITICAL

### *Alignment and focus*

Business vision is one thing. But when it comes to implementing that vision, many companies stumble. Our leadership understands the fundamentals of our business, and we make sure that our employees do too. It's our alignment, our focus and our culture that allow us to make the right moves at the right times.

We also believe that quality of governance is just as important as winning the game. With 203 years of combined experience in this industry, NOVA Chemicals' executive team knows how to win. We understand that shareholder value creation defines success and everything else must be a means to that end.



## EXECUTIVE LEADERSHIP TEAM

### Jeffrey M. Lipton

PRESIDENT AND CHIEF EXECUTIVE OFFICER

Jeff assumed his current position in 1998, and has been with the company since 1994 when he joined NOVA Corporation as Senior Vice President and Chief Financial Officer. He has over 37 years of chemical industry experience.

### Larry A. MacDonald

SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER

Larry has been with the company since 1979 when he joined NOVA Corporation of Alberta as Controller. His financial expertise spans 27 years, with 23 of those years in chemicals.

### Jack S. Mustoe

SENIOR VICE PRESIDENT, LEGAL AND GENERAL COUNSEL

Jack first joined NOVA Corporation in 1988 as Senior Vice President, General Counsel & Corporate Secretary. He has over 27 years of experience in the legal profession, with a 23-year focus in the energy and petrochemical sectors.

### Sheila H. O'Brien, C.M.

SENIOR VICE PRESIDENT, HUMAN RESOURCES, PUBLIC AFFAIRS, GOVERNMENT AND INVESTOR RELATIONS

Sheila joined NOVA Corporation in 1992 as Director of Public Affairs, and assumed her current role in 1998. She has 30 years of experience in the energy and petrochemical industries, in the areas of human resources and external relations.

### Christopher D. Pappas

SENIOR VICE PRESIDENT AND PRESIDENT, STYRENICS

Chris joined the company in his current role in July of 2000. His 25 years of experience contain a variety of management, marketing and commercial positions—all within the chemicals arena.

### A. Terence Poole

EXECUTIVE VICE PRESIDENT, CORPORATE STRATEGY AND DEVELOPMENT

Terry joined NOVA Corporation of Alberta as Vice President and Controller in 1988. He has over 37 years of experience in the areas of finance and accounting, with 14 years in the chemicals industry.

### Dale H. Spiess

SENIOR VICE PRESIDENT AND PRESIDENT, OLEFINS/POLYOLEFINS

Dale has been with the company since 1998 and assumed his current role in 2001. He has a total of 36 years experience in the chemicals industry.

### John L. Wheeler

SENIOR VICE PRESIDENT AND CHIEF INFORMATION OFFICER

John assumed his current position when he joined the company in 1998. He has 26 years of information technology experience, with 15 years devoted to the chemicals business.

## SUPPLYING THE MARKET

*What we make and where*

### OLEFINS/POLYOLEFINS BUSINESS

Advanced SCLAIRTECH™ technology, new and efficient, large-scale facilities and a sustainable feedstock advantage combine to form the foundation of NOVA Chemicals' Olefins/Polyolefins business. Our four Canadian manufacturing sites have the capability of producing 6.6 billion pounds of ethylene and 3.7 billion pounds of polyethylene resins per year. The Joffre, Alberta facility is the largest, and one of the lowest-cost, ethylene/polyethylene production facilities in the world.

#### *Ethylene*

Corunna, Ontario	1,600
Joffre, Alberta	4,950

#### *Polyethylene\**

St. Clair River, Ontario	670
Joffre, Alberta	2,160
Mooretown, Ontario	830

\* includes: High-Density (HDPE); Low-Density (LDPE); Linear Low-Density (LLDPE); and Very Low-Density (VLDPE).

### STYRENICS BUSINESS

NOVA Chemicals is one of the largest and broadest styrenic polymer producers in the world. Our eleven manufacturing sites throughout Europe and North America produce over 3.4 billion pounds of styrenic polymers—including solid polystyrene, expandable polystyrene and high performance copolymers. Three other sites produce over 2.6 billion pounds of styrene monomer annually.

#### *Styrene Monomer*

Bayport, Texas	1,250
Channelview, Texas <sup>(1)</sup>	400
Sarnia, Ontario	950

#### *Expandable Polystyrene (EPS)*

Berre, France	140
Breda, the Netherlands	200
Carrington, England	155
Monaca, Pennsylvania	285
Painesville, Ohio	85
Ribecourt, France	200

#### *Solid Polystyrene (SPS) and*

#### *High Performance Styrenics (HPS)*

Belpre, Ohio	480
Breda, the Netherlands <sup>(2)</sup>	210
Carrington, England	400
Chesapeake, Virginia <sup>(2)</sup>	300
Decatur, Alabama	425
Monaca, Pennsylvania <sup>(2)</sup>	120
Montréal, Quebec	130
Springfield, Massachusetts <sup>(2)</sup>	330

<sup>(1)</sup> This represents our equity position in the Lyondell Chemical Company facility and does not include a long-term tolling arrangement for an additional 400 million pounds.

<sup>(2)</sup> These facilities also manufacture certain HPS products—marketed under names such as: ARCEL®, DYARK®, NAS®, STYROSUN®, ULTRA LOW™, ZYLAR®, ZYNTAR®.

NOTE: All capacities shown in millions of pounds.



# INNOVATION IS WHAT YOU MAKE IT

17

## CREATING NEW VALUE IN TRADITIONAL MARKETS

We have a strong focus on our two businesses: Olefins/Polyolefins and Styrenics. We know these businesses inside and out. This deliberate focus, combined with operating efficiency, will give us significant leverage in the upward movement of the supply-demand cycle. But for now, we refuse to remain stagnant.

Research and technology provide a solid foundation for NOVA Chemicals and set us apart from much of the competition. Through our five research and technology sites, we are able to develop, tailor and improve our products. Leveraging our knowledge helps us create

successful new solutions for our customers' many market segments.

Our Styrenics business is number one in North American production capacity, and now it's time to redefine the value we bring to the marketplace. The launch of our high-margin growth product initiatives will do just that. You'll see much of the same in our Olefins/Polyolefins business as we commercialize our full slate of Advanced SCLAIRTECH technology resins. Together, our businesses are elevating traditional markets and creating shareholder value through the growth and development of new products.

**10%**  
projected annual  
market growth

#### KEEPING IT ALL TOGETHER

Stretch film is currently a 1.5 billion pound market and is expected to have a growth rate of 10% annually. Industrial stretch film, like this pallet wrap, requires an extraordinary amount of toughness. Our new resins meet that challenge.

**9%**  
projected annual  
market growth

#### FROZEN FOOD CONVENIENCE

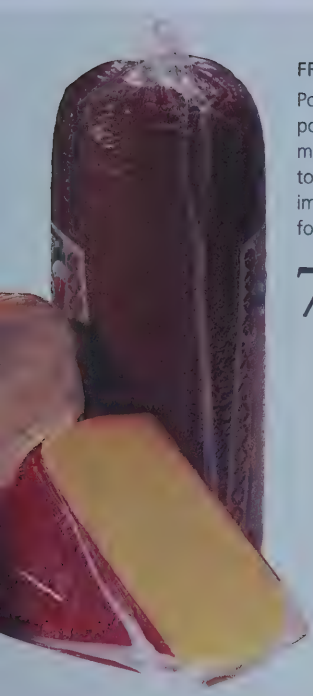
Frozen packaging is a segment to watch. Today, this 270 million pound market is growing due to consumer demand for more convenience—food they can make at home, but in a hurry. Our new LLDPE resins have excellent low-temperature performance—to keep food protected.



## POLYETHYLENE — PROFITABLE GROWTH FOR THE FUTURE

For 2002 and into the future, the spotlight for this business is on Advanced SCLAIRTECH technology. Over the last 12 months, NOVA Chemicals made great strides advancing this new technology. We exceeded our target volume, producing a total of 410 million pounds, while commercializing 16 new polyethylene grades.

While many of these new resins are for high-density polyethylene applications, we clearly see the future of Advanced SCLAIRTECH technology resins being focused on films—specifically, performance films. We are broadening our slate of film grades to meet the growing needs of the market, and more importantly, to



#### FRESHNESS—SEALED IN

Polyethylene film dominates the 615 million pound meat, poultry and cheese packaging market. Our new VLDPE resins have excellent toughness and sealing properties—features important for vacuum-sealed, shrink-wrapped food packaging.

**7.5%**  
projected annual  
market growth

#### WHAT YOU SEE IS WHAT YOU GET

Consumers want to see what they are buying and packaging engineers want their bags to be strong—a difficult combination of criteria. Today, fresh produce packaging is a 220 million pound market, with a demand for resins to meet these challenging requirements. Our new LLDPE resins are crystal clear and super strong.

**7%**  
projected annual  
market growth



surpass the expectations and requirements of our customers.

NOVA Chemicals markets a variety of polyethylene resins, each with specific performance characteristics, which are used for a variety of end-use products—from everyday household

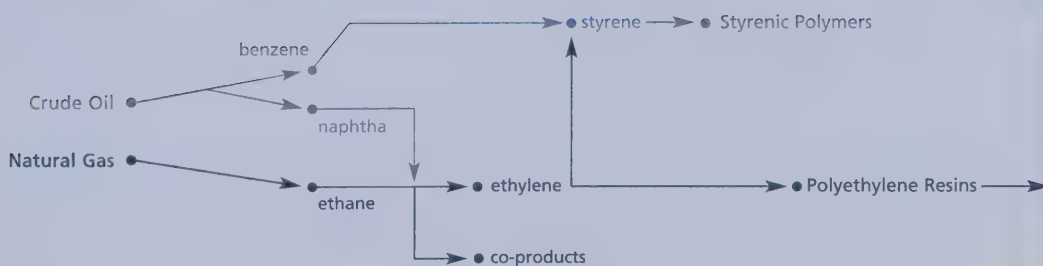
items to large-scale industrial applications. Names such as NOVAPOL®, SCLAIR®, and SCLAIR ASTute™ are well known by our customers, but the products you see here bring our resins to life.





## POLYETHYLENE— A KITCHEN STAPLE

Grocery shopping without bringing home any polyethylene? It's almost impossible. This photo, along with the raw materials flowchart, will show you where polyethylene begins—and how it ends up—somewhere in your kitchen.



Ethylene begins with natural gas or crude oil. When subjected to heat, pressure and certain catalysts (substances used to control chemical reactions), ethylene molecules join together into long, repeating carbon chains. The joined molecules form a plastic resin that we know as polyethylene. Just follow the lines to see how our feedstocks become your typical kitchen staple.





5%

projected annual market  
growth for injection-molded  
plastics for appliances

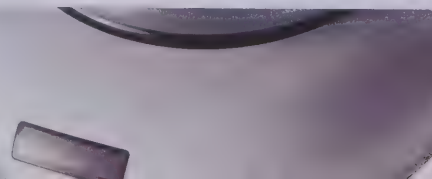
#### OUR GLOSS REALLY SHINES

Resin sales for injection-molded appliances and components are over 750 million pounds per year. Our new advanced styrenic polymer, FX 550, has high-impact and high-gloss, and is designed specifically for small appliances and housewares.

## STYRENICS — OPPORTUNITIES ARE EVERYWHERE

In 2002, the Styrenics business launched a four-point effort: to improve the company's position in styrene monomer; participate in industry consolidation; build a presence in high-margin growth products; and improve the business across its assets and processes. Implementation began in July 2002 and results soon followed.

Our first success: we improved our styrene position by signing a long-term supply contract with BASF. This contract provides styrene monomer to our European styrenics business at our U.S. production costs. At the same time, we began to aggressively develop and market a full slate of high-margin growth polymer products.






4-6%  
projected annual  
market growth

#### CLARITY, FOR SAFETY'S SAKE

Plastics usage in the medical market continues to grow because of safety demands and increasing cost concerns. Demand for clear polymers in medical applications is estimated to be 180 million pounds per year. Our ZYLAR resins retain clarity after sterilization for more accurate readings—important in devices such as this blood filter.



9%  
projected annual  
market growth

#### GRAPES, NOT GRAPE JUICE

We have 83% of the fast-growing, EPS "grape box" business. Our success and solid reputation in this market is a gateway to more advanced protective packaging applications—for both our EPS and ARCEL resins.

The products you see here are all part of our high-margin growth initiative. Our objective is to create a portfolio of products that offers our customers advanced performance and processing advantages at an attractive total cost, while delivering value to our shareholders. The development of advanced styrenic polymers will allow

us to compete in a variety of non-traditional markets, creating unlimited opportunities and increasing market potential. NOVA Chemicals' Styrenics business is setting the stage for change.



## STYRENICS— PACKING FOR A PICNIC

Styrenics and picnics go hand in hand—from the cups and coolers to the convenience of food packaging, and possibly even your car's dashboard. This photo shows you how our styrenic polymers become the picnic items that you just can't do without.

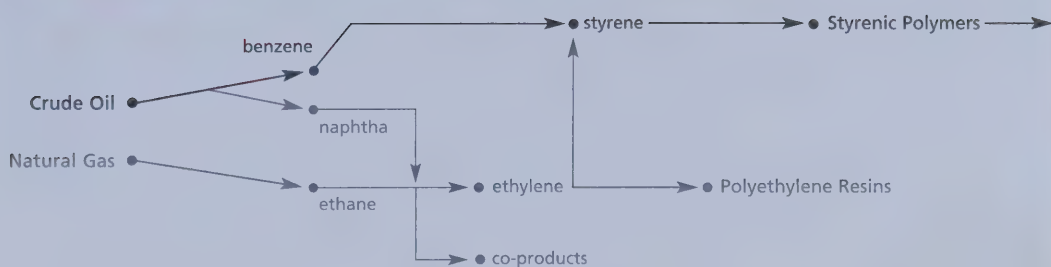




Cups / Plates  
Utensils



Recreation  
Equipment



Styrene monomer is a clear, colorless liquid that is a component of materials used to make thousands of everyday products. Styrene is derived from benzene and ethylene and is the primary raw material from which polystyrene is made. These lines take you from feedstocks, to resins, to the summer's first picnic.

## 2002 BUSINESS DISCUSSION

### NOVA CHEMICALS

*A straightforward commodity chemical company*

NOVA Chemicals has two product lines: Olefins/ Polyolefins and Styrenics. Our products are basic materials used in manufacturing an array of consumer and industrial applications. Although we compete with some of the world's largest chemical companies, our strength lies in knowing that we are a cyclical, commodity chemical company. Even more importantly, we act like it and take advantage of it.

Throughout the trough conditions of the past few years, our primary objective was cash generation. The key to our success in this area was our ability to quickly focus and mobilize our entire organization around this critical objective. We controlled the controllables—and in the process reduced debt by \$307 million in 2002 (see figure 3 on page 30).

To fully understand the potential of our company, it's important to have a clear view of what drives our performance. The *demand* for our products is driven

by general economic growth rates, while the *supply/ demand* balance—or operating rates—drives our profitability. Because the trough has been so long and so deep, there has been relatively little building of capacity. Very low inventory levels throughout the supply chain, combined with the slightest pick up in demand will quickly increase operating rates.

And finally, we offer leverage. In fact, we have the most operating leverage, versus any of our competitors, in the products where we compete. This leverage provides investors with a direct pathway to invest in two of the product chains that could recover the fastest.

We have a simple and straightforward approach to the way we operate our company. Being a commodity chemical company has its challenges. Our solution is to continuously improve our business by controlling what we can control. That way, we realize our full potential when the cycle turns our way.

The information in this Annual Report contains forward-looking statements with respect to NOVA Chemicals Corporation (NOVA Chemicals), its subsidiaries and affiliated companies. By their nature, these forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those contemplated by the forward-looking statements. These risks and uncertainties include: commodity chemicals price levels (which depend, among other things, on supply and demand for these products, capacity utilization and substitution rates between these products and competing products); feedstock availability and prices; operating costs; terms and availability of financing; technology developments; currency exchange rate fluctuations; starting up and operating facilities using new technology; realizing synergy and cost savings targets; meeting time and budget targets for significant capital investments; avoiding unplanned facility shut downs; safety, health and environmental risks associated with the operation of chemical plants and marketing of chemical products, including transportation of these products; public perception of chemicals and chemical end-use products; performance of Methanex Corporation; risks of a further prolonged economic downturn; uncertainties associated with the North American, European and Asian economies; and other risks detailed from time to time in the publicly filed disclosure documents and securities commissions reports of NOVA Chemicals and its subsidiaries or affiliated companies. Implementation of announced price increases depends on many factors, including feedstock costs, market conditions and the supply/demand balance for each particular product. Successful price increases are typically phased in over several months, vary from grade to grade and can be reduced in magnitude during the implementation period.

## NOVA CHEMICALS' HIGHLIGHTS

(MILLIONS OF U.S. DOLLARS, EXCEPT PER SHARE AMOUNTS AND WHERE NOTED)	2002	2001	2000
Net income (loss)			
Olefins/Polyolefins	\$ (5)	\$ (2)	\$ 258
Styrenics	(102)	(181)	42
Methanex <sup>(1)</sup>	32	14	23
Net income (loss) before preferred securities dividends and distributions and unusual items	(75)	(169)	323
Preferred securities dividends and distributions	(31)	(33)	(36)
Net income (loss) to common shareholders before unusual items	(106)	(202)	287
Unusual items (after-tax) <sup>(2)</sup>	(6)	41	(21)
Net income (loss) to common shareholders after unusual items	\$ (112)	\$ (161)	\$ 266
Earnings (loss) per share before unusual items			
— Basic	\$ (1.24)	\$(2.37)	\$3.23
— Diluted	\$ (1.24)	\$(2.37)	\$3.06
Earnings (loss) per share after unusual items			
— Basic	\$ (1.30)	\$(1.88)	\$3.00
— Diluted	\$ (1.30)	\$(1.88)	\$2.84
Weighted average common shares outstanding (millions)	86	85	89

<sup>(1)</sup> 2002 and 2001 exclude NOVA Chemicals' after-tax share of Methanex's plant write-offs of \$27 million and \$3 million, respectively, which are reflected on the unusual items line.

<sup>(2)</sup> See page 53 for listing of unusual items.

## CHANGES IN NOVA CHEMICALS' NET INCOME <sup>(1)</sup>

(MILLIONS OF U.S. DOLLARS)	2002 VERSUS 2001	2001 VERSUS 2000
Higher (lower) margins	\$ 72	\$(575)
Higher (lower) sales volumes	65	(88)
	137 <sup>(2)</sup>	(663) <sup>(2)</sup>
Lower SG&A and R&D	16	5
Higher depreciation	(36)	(42)
Lower (higher) interest expense <sup>(3)</sup>	1	(43)
(Higher) lower tax expense	(42)	260
Higher (lower) equity earnings in Methanex	18	(9)
Lower preferred securities dividends and distributions	2	3
Increase (decrease) in net income to common shareholders before unusual items	96	(489)
Unusual items	(47)	62
Increase (decrease) in net income to common shareholders after unusual items	\$ 49	\$(427)

<sup>(1)</sup> All line items prior to "(higher) lower tax expense" are pre-tax amounts; all items thereafter are after-tax amounts.

<sup>(2)</sup> Calculated as revenue less feedstock and operating costs.

<sup>(3)</sup> Net of capitalized interest.



## THE BUSINESS OF OLEFINS AND POLYOLEFINS

*Built on sustainable competitive advantage*

We may not be an industry giant, but we perform like one.

In 2000, we started up the largest ethylene cracker in the world in Joffre, Alberta, Canada. Joffre has a lower average cost of production than similar ethylene plants in the United States Gulf Coast (USGC). This is known as our Alberta Advantage. Historically, this Advantage has averaged 6¢ per pound and we can produce roughly 5 billion pounds of ethylene at this site.

Although our business is primarily conducted in North America, we have a long history of selling polyethylene in China. In fact, we are North America's largest polyethylene exporter to China, and they are the largest consumer of polyethylene in the Asia/Pacific region. We have a unique ability to service China from Western Canada, and aside from the Middle East, we have one of the most competitive delivered cost positions. Our highly competitive transportation costs and packaging systems allow us to service China for virtually the same cost that USGC producers pay to deliver to customers in the northeast United States.

Our new Advanced SCLAIRTECH polyethylene technology continues to surpass production targets. In

2002, we sold 410 million pounds of product and commercialized a total of 16 grades of polyethylene. Our new products compete with octene and metallocene resins, and are known for their clarity, processability and toughness. By the end of 2003, we expect to have a product slate of 26 grades and to sell 650 million pounds of product. By the end of 2005, we expect to have full commercialization of a high margin product line and to realize about 6¢ per pound average premium.

We partner for the future. In 2002, NOVA Chemicals and BP announced an agreement under which NOVA Chemicals granted BP the rights to use and sub-license its proprietary single-site catalysts. In turn, BP licensed its metallocene catalyst technology portfolio to NOVA Chemicals for use in polyethylene manufacturing. NOVA Chemicals' complementary single site technology is expected to enhance the scope and performance of next generation polyethylene products. By working together, both companies expect to accelerate new technology advances to produce gas-phase polyethylene resins with superior performance and value to customers. NOVA Chemicals and BP also expect to market this technology to third parties.

### OLEFINS/POLYOLEFINS FINANCIAL HIGHLIGHTS

(MILLIONS OF U.S. DOLLARS, EXCEPT WHERE NOTED)	2002	2001	2000
Revenue <sup>(1)</sup>	\$1,930	\$2,014	\$2,228
EBITDA <sup>(2)</sup>	\$ 233	\$ 189	\$ 525
Depreciation and amortization	\$ 166	\$ 132	\$ 86
Operating income	\$ 67	\$ 57	\$ 439
Net income (loss) <sup>(3)</sup>	\$ (5)	\$ (2)	\$ 258
Average capital employed <sup>(4)</sup>	\$1,764	\$1,689	\$ 987
After-tax return on capital employed <sup>(5)</sup>	1.6%	1.6%	27.6%

<sup>(1)</sup> Before inter-segment eliminations.

<sup>(2)</sup> Operating income excluding depreciation and amortization.

<sup>(3)</sup> Before distributions and dividends on preferred shares.

<sup>(4)</sup> Average capital employed equals cash expended on plant, property and equipment (less accumulated depreciation) and working capital and excludes assets under construction.

<sup>(5)</sup> Equals net income (loss) plus after-tax interest expense divided by average capital employed.

## STYRENICS—LEADERSHIP TAKES HARD WORK AND LONG-RANGE THINKING

*Progress one step at a time*

Through a series of acquisitions, we have created a world-scale Styrenics business with an extensive slate of styrenic polymers. In North America, we are #1 in the production of styrene monomer and expandable polystyrene (EPS) and we are #2 in solid polystyrene manufacturing. In Europe, we rank #1 in EPS production and #6 in solid polystyrene.

The most exciting and promising area of our Styrenics business is in the development of high-margin growth products. We are focusing our energy on products that deliver enhanced performance and processing advantages to our customers and contribute much higher than average margins to our business. This segment was 16% of our total volume in 2002, and is expected to grow to 30% by 2005. Our current work includes the following products:

### CURRENT SLATE OF HIGH-MARGIN GROWTH PRODUCTS

PRODUCT	EXAMPLES OF APPLICATIONS
ARCEL®	Protective packaging
ZYNTAR®	Ignition resistant consumer electronics
NAS®	Medical and cosmetics
ZYLAR®	Computer/printer peripherals
ULTRA LOW™ Pentane EPS	Less use of blowing agents without sacrificing properties
STYROSUN®	UV protected fixtures
FX Solid Polystyrene	Food packaging and appliances

Our Styrenics story is not only about getting bigger—it's about making the kinds of decisions that show leadership and make us stronger. Over the last two years, we removed roughly 330 million pounds of high-cost, styrenic polymer capacity from the North American marketplace, which equates to about 4% of total North American production capacity. In Europe, we reduced styrenic polymer production capacity by 220 million pounds or roughly 3% of European styrenic polymer capacity. We also acquired the customer list from Deltech Polymers Corporation when they chose to cease production at their Ohio polystyrene facility, which had a rated capacity of 140 million pounds. We are supplying their former customers from our existing facilities, removing another 2% of North American production capacity.

We partner for the future. NOVA Chemicals and BASF signed a long-term styrene monomer supply contract. This gives both producers a secure supply of styrene monomer to their downstream businesses at producer economics in both North America and Europe. To fulfill this requirement, we announced a debottleneck of our Bayport, Texas plant by 450 million pounds. This approach helps two major styrenic polymer producers meet their regional feedstock needs while adding only minimal new capacity to the industry.

29

### STYRENICS FINANCIAL HIGHLIGHTS

(MILLIONS OF U.S. DOLLARS, EXCEPT WHERE NOTED)	2002	2001	2000
Revenue <sup>(1)</sup>	\$1,305	\$1,314	\$1,866
EBITDA <sup>(2)</sup>	\$ (18)	\$ (127)	\$ 195
Depreciation and amortization	\$ 100	\$ 98	\$ 102
Operating income (loss)	\$ (118)	\$ (226)	\$ 93
Net income (loss) <sup>(3)</sup>	\$ (102)	\$ (181)	\$ 42
Average capital employed <sup>(4)</sup>	\$1,248	\$1,392	\$1,546
After-tax return on capital employed <sup>(5)</sup>	(5.5)%	(10.6)%	4.2%

<sup>(1)</sup> Before intersegment eliminations.

<sup>(2)</sup> Operating income (loss) excluding depreciation and amortization.

<sup>(3)</sup> Before distributions and dividends on preferred securities.

<sup>(4)</sup> Average capital employed equals cash expended on plant, property and equipment (less accumulated depreciation) and working capital and excludes assets under construction.

<sup>(5)</sup> Equals net income (loss) plus after-tax interest expense divided by average capital employed.

## WE MOVE FAST AND EFFECTIVELY

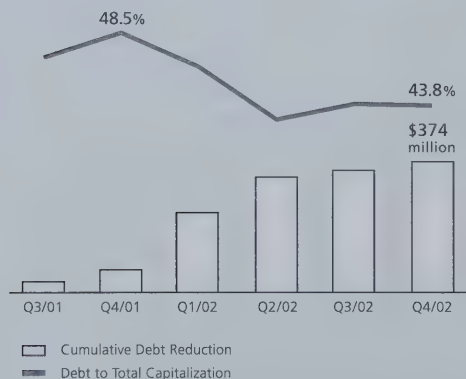
*Alignment is critical*

Midway through 2001, we recognized the need to change the way we think and the way we work. We challenged ourselves to generate cash in every area of our business. We found new, more productive ways of running our company. As a result, we reduced debt by \$374 million in 2002 and brought our debt to total capitalization down to 43.8% from 48.5% in 2001. The series of charts below show what we did and how we did it.

### DEBT REDUCTION

Over the last six quarters, NOVA Chemicals reduced debt by \$374 million. The major factors contributing to this achievement were aggressive working capital reductions, non-strategic asset sales, improved cash flow from operations and the receipt of tax refunds.

Fig. 3 ~ Debt Reduction



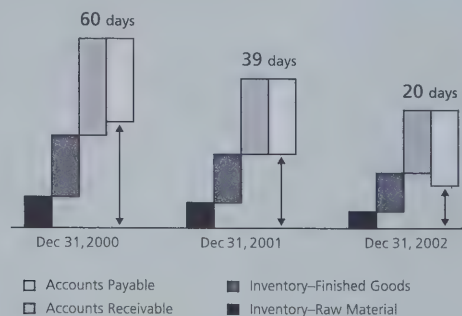
### CASH FLOW CYCLE TIME (CFCT) IMPROVEMENT\*

NOVA Chemicals uses CFCT to measure process improvements as well as working capital management. CFCT is measured as:

$$\frac{\text{Inventory} + \text{Accounts Receivable} - \text{Accounts Payable}}{\text{Average Daily Sales}}$$

At the end of 2000, NOVA Chemicals' CFCT was 60 days. Since then we have worked diligently to optimize inventory levels, reduce our overdue accounts receivable and improve payment terms with our suppliers. We ended 2002 with CFCT at an all-time low of 20 days. Had we maintained our 2001 year-end CFCT, we would have tied up \$170 million more in operating working capital at the end of 2002. Over the long term, we expect to maintain CFCT in a 25 to 30 day range.

Fig. 4 ~ CFCT Improvement



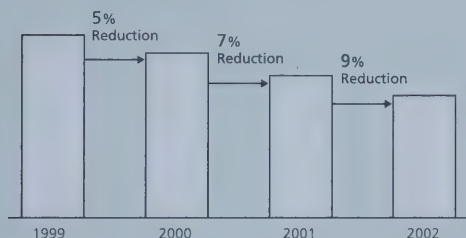
\* For purposes of this calculation, certain non-operating amounts such as interest and taxes are excluded from accounts payable and accounts receivable balances.



## FIXED-COST REDUCTION

NOVA Chemicals is committed to fixed-cost reduction. For the third year in a row, we reduced fixed costs by 5% or more on a per pound of capacity basis. In North America and Europe, we eliminated high-cost production and relocated production to more efficient plants.

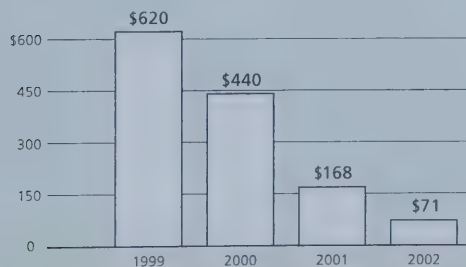
Fig. 5 ~ Fixed-Cost Reduction  
(cents per pound of capacity)



## CAPITAL EXPENDITURES

During 2002, we reduced capital expenditures by \$97 million, going from \$168 million in 2001 to \$71 million in 2002. Our modern and well-maintained assets allowed us to reduce spending, while maintaining safe and reliable operations of our facilities. In 2003, if business recovers as we expect, we will return to more typical spending levels of \$125 million to \$150 million. Expenditures will be primarily for sustaining capital and small growth projects.

Fig. 6 ~ Capital Expenditures  
(millions of U.S. \$)

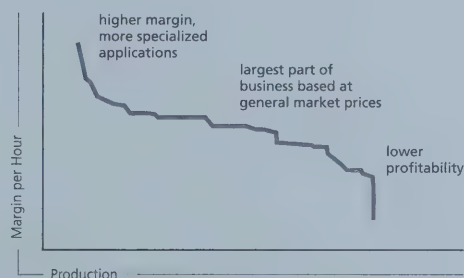


## MARGIN MAXIMIZATION

NOVA Chemicals developed a margin maximization tool that takes advantage of information from our SAP® system and analyzes margin for each commercial transaction. This allows us to rationalize our product mix and target the most profitable areas of business growth. In 2002, we realized an extra \$23 million in after-tax operating earnings by using the Margin Model.

After identifying the most profitable mix of products to sell, our Sales, Operations and Planning process utilizes SAP® tools to optimize a portfolio of product/customer location combinations for all our plants.

Fig. 7 ~ Margin Maximization



## THE REALITY OF CYCLES

*When demand meets supply*

Increases in supply often occur in large increments as producers attempt to gain economies of scale. The cyclical nature of the chemical industry is driven by the size and timing of new capacity additions, as well as demand growth rates. When supply additions outpace demand growth, industry-operating rates fall off and weak prices and margins result in troughs. In contrast, when demand grows more rapidly than supply, industry operating rates climb, and strong prices and margins result in peaks. Because of the time it takes to build world-scale petrochemical plants, the supply picture in our industry is relatively fixed about three to five years in advance.

The long-term trend for demand of our products typically grows as a function of both consumer and industrial activity, which can be measured by Gross Domestic Product (GDP). As shown in the chart below, market demand for polyethylene and polystyrene have historically grown at 1-2 times GDP depending on the region of the world.

### AVERAGE ANNUAL GROWTH 1992–2002

	PERCENT OF GDP	POLYETHYLENE GROWTH (MULTIPLE OF GDP)	EPS AND SPS GROWTH (MULTIPLE OF GDP)
North America	3.2%	1.3	0.9
Europe	2.1%	1.5	1.0
Asia	3.1%	2.3	2.1
World	2.7%	1.9	1.7

Source: Global Insight, Inc. – GDP and CMAI – Growth Rates

### HISTORICALLY LOW INVENTORY LEVELS

Inventory can have a significant effect on supply and demand. When our customers choose to reduce inventories, demand falls off quickly. When our customers choose to expand inventories, demand increases rapidly. Over the last 2 years, producers and customers have dramatically reduced inventories. In fact, we finished 2002 at all-time low levels of inventory on a days-of-sales basis.

### INDUSTRIAL PRODUCTION—A BETTER EARNINGS GUIDE

Because demand generally tracks GDP, the belief has long been held that chemical industry performance tracks GDP. In reality, the Industrial Production (IP) Index is a more accurate reflector of NOVA Chemicals' earnings performance.

In 2003, the IP Index is forecast to grow at an average annual rate of 2.9% with growth rates as high as 6.5% by year-end. If NOVA Chemicals' earnings continue to track the IP Index, we would expect to see meaningful earnings improvement.

Fig. 8 ~ IP Index and GDP

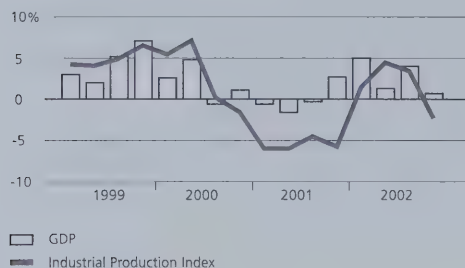
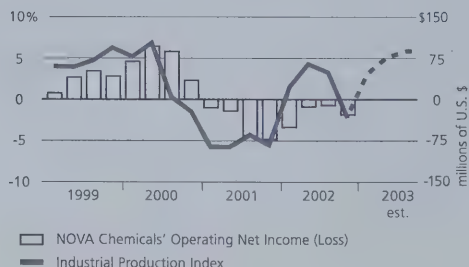


Fig. 9 ~ IP Index and NOVA Chemicals' Operating Net Income (Loss)

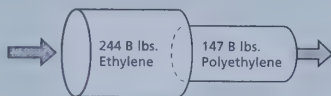


Source (figures 8 and 9): Global Insight, Inc.

## DRIVERS OF PROFITABILITY

*The differences in dynamics*

### OLEFINS/POLYOLEFINS INDUSTRY DYNAMICS



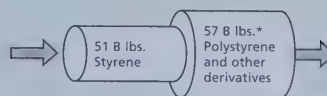
Source: Chem Systems

Because there is less polyethylene than ethylene production capacity in the world, polyethylene is the bottleneck in our Olefins/Polyolefins chain and therefore drives profitability. During 2002, polyethylene operating rates averaged 85%. These rates are expected to increase in 2003 as limited new capacity comes on stream, producers close high cost plants, and industrial production shows signs of increasing.

Ethylene is very difficult to transport so it tends to be more regionally sensitive. The U.S. Gulf Coast ethylene market is expected to get much tighter during 2003 due to planned turnarounds and the elimination of high cost ethylene production capacity. This may also play a role in driving North American olefins/polyolefins profitability in 2003 and beyond.

As stated earlier, the supply side of an operating rate curve is relatively fixed for the next three to five years. In the chart below, Chem Systems uses a 5.7% demand assumption for years 2003–2007. Over the past 15 years, the five year compounded annual growth rate for polyethylene demand ranged from 4.8% to 6.5%.

### STYRENICS INDUSTRY DYNAMICS



Source: CMAI

\*in Styrene pounds equivalent

Because there is less styrene monomer than polystyrene production capacity in the world, styrene monomer is the bottleneck in the Styrenics chain, and the link that drives profitability. During 2002, styrene monomer operating rates averaged 90%. These rates are expected to increase in 2003 as limited new capacity is coming on stream, industrial production is expected to increase and inventories throughout the chain are very low.

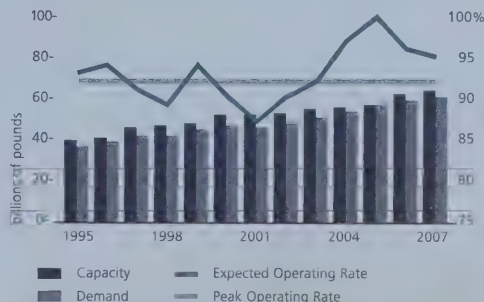
Styrene monomer from propylene oxide/styrene monomer (POSM) plants grew much faster than styrene monomer demand in the 1990's. Technology was developed recently to produce only propylene oxide. This is expected to dramatically slow the growth of styrene monomer capacity from POSM production.

With the supply side relatively fixed through 2006, demand for styrene monomer will drive high operating rates. In the chart below, CMAI uses a 4.2% annual demand assumption for years 2003–2007. Over the past 15 years, the five year compounded annual growth rate for styrene monomer demand has ranged from 4.2% to 5.8%.

Fig. 10 ~ Global Polyethylene Capacity Utilization



Fig. 11 ~ Styrene Monomer Capacity Utilization



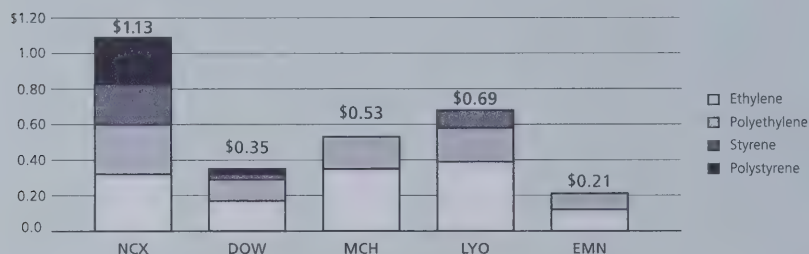
Peak market conditions exist for polyethylene when operating rates are above 90% while styrene monomer operating rates reach peak conditions at 92%. If industry analysts are correct, we should see both peaking by 2004 and staying strong for a relatively long time.



## A PENNY IS SIGNIFICANT TO NCX

NOVA Chemicals' leverage to the Olefins/Polyolefins and Styrenics businesses is greater than any other chemical company in North America. This chart illustrates our estimate of a simultaneous 1¢ per pound per year margin change in each of ethylene, polyethylene, styrene and polystyrene product categories on the after-tax basic earnings per share of NOVA Chemicals and our peers.

Fig. 12 ~ NOVA Chemicals' Earnings Leverage



A 1¢ improvement in margin is significant for NOVA Chemicals.

34

This chart illustrates maximum potential sensitivity to margin change for the products indicated based solely on NOVA Chemicals' relative leverage to ethylene, polyethylene, styrene and polystyrene.

Does not take into account a number of other factors, any one of which may influence the actual outcome.

Assumes a simultaneous 1¢ per pound change in margin in all four product lines for a period of one year.

References to NOVA Chemicals' peers include the following chemical companies: The Dow Chemical Company (DOW), Millennium Chemicals Inc. (MCH), Lyondell Chemical Company (LYO), and Eastman Chemical Company (EMN).

The referenced peers have other products that impact their earnings sensitivity.

The chart illustrates sensitivity for only those products that NOVA Chemicals and the referenced peers may compete in.

## WE BELIEVE

*NOVA Chemicals, along with analysts and investors, share two fundamental beliefs about the chemical industry—first, there will be a peak, and second the risk/reward balance for investing in our industry is excellent.*

*We have demonstrated the ability to perform throughout tough economic conditions and in doing so, we have continuously improved the way we operate our company. We believe that now is the time to invest in NOVA Chemicals. We know who we are—a commodity chemical company—and we are deliberate about doing what it takes to build shareholder value.*

# 2002 FINANCIAL REVIEW

## FORWARD-LOOKING INFORMATION

The information in this Annual Report contains forward-looking statements with respect to NOVA Chemicals Corporation (NOVA Chemicals), its subsidiaries and affiliated companies. By their nature, these forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those contemplated by the forward-looking statements. These risks and uncertainties include: commodity chemicals price levels (which depend, among other things, on supply and demand for these products, capacity utilization and substitution rates between these products and competing products); feedstock availability and prices; operating costs; terms and availability of financing; technology developments; currency exchange rate fluctuations; starting up and operating facilities using new technology; realizing synergy and cost savings targets; meeting time and budget targets for significant capital investments; avoiding

unplanned facility shut downs; safety, health and environmental risks associated with the operation of chemical plants and marketing of chemical products, including transportation of these products; public perception of chemicals and chemical end-use products; performance of Methanex Corporation; risks of a further prolonged economic downturn; uncertainties associated with the North American, European and Asian economies; and other risks detailed from time to time in the publicly filed disclosure documents and securities commissions reports of NOVA Chemicals and its subsidiaries or affiliated companies. Implementation of announced price increases depends on many factors, including feedstock costs, market conditions and the supply/demand balance for each particular product. Successful price increases are typically phased in over several months, vary from grade to grade and can be reduced in magnitude during the implementation period.

# MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*All financial information is in U.S. dollars unless otherwise indicated.*

*This discussion should be read in conjunction with information contained in the consolidated financial statements and the notes thereto. The consolidated financial statements have been prepared in accordance with Canadian generally accepted accounting principles (GAAP). The effect of significant differences between Canadian and United States GAAP have been disclosed in Note 24 to the consolidated financial statements.*

## OVERVIEW

NOVA Chemicals Corporation derives its revenues, earnings and cash flow from two commodity chemical businesses: Olefins/Polyolefins and Styrenics. Our Olefins/Polyolefins business produces ethylene, polyethylene and chemical and energy co-products. Our Styrenics business produces styrene monomer and styrenic polymers. We operate major olefins/polyolefins production facilities near Joffre, Alberta and Corunna, Ontario. We have major styrene facilities located near Bayport, Texas and Sarnia, Ontario. Our styrenic polymers manufacturing facilities are located at sites in the United States, Canada, the United Kingdom, the Netherlands and France.

Ethylene and styrene are basic petrochemicals used to manufacture a wide variety of polymers and other chemical products. We produce polyethylene and styrenic polymers, primarily from our internal ethylene and styrene production. We also have an equity interest and long-term tolling arrangements to acquire styrene from Lyondell Chemical Company's Channelview, Texas plant on the United States Gulf Coast (USGC), and styrene purchase arrangements with Shell Chemical Company, BASF Corporation and other parties in North America and Europe. Ethylene and styrene in excess of our internal consumption are sold to third parties. In addition, we engage in various swap transactions with other producers of ethylene and styrene, which provide us producer economics in regions where we have limited or no styrene monomer production capability.



The following table summarizes the average benchmark prices for our principal products and raw materials and industry capacity utilization rates for the periods shown below. Average benchmark prices are not intended to be actual prices realized by us or any other petrochemical company.

	2002						
	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	2000	ANNUAL 2001	2002
<b>BENCHMARK PRINCIPAL PRODUCT</b>							
<b>PRICES (PER POUND):</b>							
Ethylene <sup>(1)</sup>	\$ 0.19	\$ 0.23	\$ 0.23	\$ 0.24	\$ 0.30	\$ 0.26	\$ 0.22
Polyethylene (weighted-average) <sup>(2)</sup>	0.33	0.36	0.41	0.42	0.42	0.39	0.38
Styrene <sup>(3)</sup>	0.26	0.33	0.36	0.35	0.40	0.31	0.33
Polystyrene (weighted-average) <sup>(4)</sup>	0.37	0.48	0.52	0.49	0.54	0.44	0.47
<b>BENCHMARK RAW MATERIAL PRICES:</b>							
NYMEX Natural Gas (per mmbtu) <sup>(5)</sup>	\$ 2.38	\$ 3.37	\$ 3.26	\$ 3.99	\$ 3.91	\$ 4.38	\$ 3.25
AECO/NYMEX basis differential (per mmbtu) <sup>(6)</sup>	0.28	0.54	1.17	0.63	0.52	0.30	0.66
WTI Crude Oil (per barrel)	21.64	26.24	28.27	28.15	30.20	25.97	26.08
Benzene (per gallon) <sup>(3)</sup>	0.86	1.25	1.38	1.28	1.38	1.02	1.19
<b>INDUSTRY CAPACITY UTILIZATION RATES (%):</b>							
North American:							
Ethylene <sup>(7)</sup>	81.8	82.9	84.3	79.4	93.4	84.0	82.1
Polyethylene <sup>(8)</sup>	86.0	89.2	85.8	81.5	89.2	81.6	85.6
Styrene <sup>(7)</sup>	82.2	97.4	86.8	82.5	93.2	75.3	87.3
Polystyrene <sup>(8)</sup>	79.7	84.5	80.3	75.1	89.5	74.9	79.9
Western European:							
Polystyrene <sup>(7)</sup>	88.6	90.7	87.7	85.5	89.5	80.4	88.1

<sup>(1)</sup> Source: Chemical Market Associates, Inc. (CMAI) – USGC Net Transaction Price.

<sup>(2)</sup> Average benchmark prices weighted according to NOVA Chemicals sales volume mix in North America. Source for benchmark prices: Townsend Polymer Services Information, Inc. (TPSI).

<sup>(3)</sup> Source: CMAI – Contract Market.

<sup>(4)</sup> Average benchmark prices weighted according to NOVA Chemicals sales volume mix in North America and Europe. Includes solid and expandable polystyrene, but excludes high performance styrenic polymers, DYLARK and other styrenic polymers. Source for benchmark prices: TPSI.

<sup>(5)</sup> Source: NYMEX Henry Hub-3-Day Average Close (NYMEX).

<sup>(6)</sup> AECO represents the weighted-average one month spot price at "AECO "C" and NOVA inventory Transfer" price as published in the Canadian Gas Price Reporter.

<sup>(7)</sup> Source: CMAI and NOVA Chemicals.

<sup>(8)</sup> Source: American Plastics Council and NOVA Chemicals.

### Factors Affecting Financial Performance

Generally, the market for commodity chemical products has grown at rates faster than general economic growth rates. Our products are cyclical and sensitive to changes in the balance between supply and demand, the price of raw materials and the level of general economic activity. Historically, these markets have experienced alternating periods of capacity additions resulting in over-capacity and declining prices and margins—called troughs—followed by tight supply, increasing prices and margins—called peaks.

Our profitability is closely tied to product pricing and feedstock costs, which are, in turn, largely influenced by energy costs and market supply and demand. The principal feedstocks used in our Olefins/Polyolefins business are natural gas liquids and crude oil or crude oil derivatives. We produce benzene, a derivative of crude oil, for use in our Styrenics business to produce styrene monomer.

The following table illustrates how changes in various factors would increase our profitability, assuming all other factors were held constant. Changes in the opposite direction would have the opposite effect.

POTENTIAL IMPACT TO NOVA CHEMICALS' PROFITABILITY OF:	(MILLIONS OF DOLLARS—ESTIMATED)		(BILLIONS OF POUNDS)
	ANNUAL PRE-TAX INCOME INCREASE	ANNUAL AFTER-TAX INCOME INCREASE	PRODUCTION CAPACITY <sup>(1)</sup>
Increase of U.S. 1¢ per pound in profit margin			
Ethylene <sup>(2)</sup>	\$48	\$31	4.8
Polyethylene	37	24	3.7
Styrene <sup>(3)</sup>	31	20	3.1
Styrenic Polymers—North America <sup>(4)</sup>	22	14	2.2
Styrenic Polymers—Europe <sup>(4)</sup>	13	8	1.3
Propylene	10	6	1.0
Decrease in cost of natural gas by U.S. 10¢ per mmbTU	11	7	—
Decrease in cost of benzene by U.S. 5¢ per gallon	20	13	—
Decrease in Canadian dollar of 1¢ vs. U.S. dollar <sup>(5)</sup>	6	6	—
Increase in Euro of 1¢ vs. U.S. dollar	2	2	—
Increase in Methanex's annual net income of \$10 million	4	3	—

<sup>(1)</sup> Estimate based on current production capacity assuming utilization of 100%. On average in 2002, our ethylene plants operated at 82% of capacity, our polyethylene plants operated at 78% of capacity, our styrene plants operated at 73% of capacity, and our styrenic polymer plants operated at 68% of capacity.

<sup>(2)</sup> Excludes cost-of-service third party sales.

<sup>(3)</sup> Includes 500 million pounds of long-term purchase agreements.

<sup>(4)</sup> Includes solid polystyrene and expandable polystyrene.

<sup>(5)</sup> Canadian dollar costs are hedged until March 2003 at which time we will be exposed to Canadian dollar exchange rate fluctuations.

### *Olefins/Polyolefins Business—Petrochemical and Feedstock Economics*

Our largest volume product is ethylene, which is central to the production of both polyethylene and styrene monomer. Seventy-five percent of our ethylene is produced at our Joffre, Alberta plant, primarily from ethane which is extracted from natural gas. The remaining twenty-five percent of our ethylene is manufactured at our Corunna, Ontario plant in a flexi-cracker that is fed with crude oil, crude oil derivatives and/or natural gas derived feedstocks.

**Joffre, Alberta ~** Our Joffre ethylene production facility is the largest in the world and has, on average, a lower cost of production than other ethane/propane plants in North America. We call this our “Alberta Advantage.” Our Alberta Advantage is comprised of three key elements:

**Natural gas ~** Alberta natural gas prices have historically been significantly below those on the USGC and are expected to remain below USGC market prices by a differential that reflects the relative transportation costs of moving natural gas from Western Canada to the U.S. Midwest and Eastern markets;

**Ethane extraction, gathering, and transportation ~** Alberta is home to large scale ethane extraction plants and an efficient gas gathering and transportation infrastructure; and

**Ethylene conversion ~** our three ethylene plants enjoy large economies of scale and energy efficiency compared to USGC ethylene crackers.

Historically, our Alberta Advantage has averaged approximately 6¢ per pound as compared to ethane/propane ethylene production facilities on the USGC. In 2002, the Alberta Advantage was approximately 4¢ per pound, down from about 5¢ per pound in 2001 and 10¢ per pound in 2000. The Alberta Advantage was lower in 2002 as compared to 2001 due to lower USGC ethane pricing that resulted from surplus USGC ethane caused by a slowdown in industrial demand. In 2000, the Alberta Advantage produced a historically higher than average 10¢ per pound cost advantage. While the Alberta Advantage will likely fluctuate from year to year, we expect that the structural advantages associated with gas transportation and the efficiency gained from large scale facilities will enable us to maintain a significant cost advantage over our USGC competitors.

All of the ethylene plants at Joffre use ethane as their primary feedstock. Ethane is extracted and delivered under medium to long-term contracts with natural gas liquids extraction and fractionation plants located in Alberta. We purchase natural gas and swap it to replace the energy value of the ethane extracted from the gas stream. We manage our ethane requirements by using our inventories and short-term spot purchases. All of our polyethylene produced at the Joffre facility is manufactured from internally produced ethylene.

**Corunna, Ontario ~** Depending on market conditions, our Corunna ethylene plant has the flexibility to optimize part of its feedstock slate by switching between natural gas liquids, crude oil and crude oil derivatives. Feedstock decisions are determined by using a model that calculates the most profitable mix of end products that can be produced from the most optimal feedstock slate.

Feedstocks for our Corunna olefins facility are obtained from a wide variety of sources. The majority of the feedstocks are crude oils and condensates, with the remainder being propanes and butanes. The crude oils are supplied from western Canadian producers via pipeline, from the United States, and from overseas. Condensate, a lighter feedstock than crude oil, yields a higher proportion of olefins feedstocks versus fuel oil products and is sourced primarily from outside North America.



Propanes and butanes are sourced from western Canadian and local producers, as well as U.S. sources. All of the polyethylene produced at the Mooretown and St. Clair River facilities is manufactured from internally produced ethylene.

Financial results in our Olefins/Polyolefins business are driven in large part by polyethylene sales. Polyethylene is a globally traded commodity product with established merchant markets. When polyethylene demand increases, the polyethylene supply and demand balance tightens, which usually leads to higher prices. Peak market conditions for polyethylene margins typically exist when nameplate operating rates for polyethylene are above 90% for a sustained period of time.

#### *Styrenics Business—Petrochemical and Feedstock Economics*

Styrene is produced from benzene and ethylene. We supply a portion of our internal requirements for these feedstocks and enter into other arrangements with third parties for the remainder. All of the ethylene and a majority of the benzene requirements for our Sarnia styrene facility are supplied from our Corunna, Ontario olefins facility. The balance of the benzene feedstock is obtained from nearby petroleum refineries. Except for some ethylene obtained through exchange, ethylene and benzene for the Bayport and Channelview facilities are obtained from external sources. Our global styrenic polymer feedstock requirements can currently be satisfied through internal styrene monomer production. Where styrene monomer is geographically dislocated, we may use a series of transatlantic swap arrangements with other producers to position the monomer where we need it.

Profitability in our Styrenics business is driven by styrene monomer because worldwide production capacity for polystyrene and other monomer derivatives exceeds that of styrene monomer. Peak market conditions for styrenics typically exist when nameplate styrene monomer operating rates are above 92% for a sustained period of time. At this operating rate, price usually moves independent of feedstock costs causing margin expansion.

Three separate acquisitions of styrenics assets from ARCO, Huntsman and Shell contributed to our long position in styrene, with more monomer than we require for our own polystyrene production. Our current annual styrene monomer production capacity, together with long-term supply contracts, exceeds our annual requirements for styrenic polymers production by approximately one billion pounds. When demand for styrene and polystyrene weakens, we are forced to sell excess styrene at low spot prices, which negatively impacts our profit margins. In a tight market, our long styrene position secures styrene for the optimum balance of styrene monomer and styrenic polymer sales. As a result, in peak conditions, a long styrene monomer position provides a source of earnings leverage.

In 2002, we signed a long-term styrene monomer contract with BASF Corporation under which we supply styrene monomer feedstock to BASF's styrenics business in the North American region and, in turn, BASF supplies styrene monomer to our European Styrenics business. This provides both companies with styrene monomer at producer economics. To fulfill this requirement, we announced a 450 million pound debottlenecking of our Bayport styrene monomer plant.

In 2002, our Styrenics business focused on eliminating high cost production. We closed our 100 million pound suspension polystyrene reactor in Chesapeake, Virginia, bringing our total polystyrene closures over the last two years to 330 million pounds of North American capacity. In 2002, we also shut down suspension solid polystyrene reactors at our Breda facility in the Netherlands and eliminated 55 million pounds, or 8%, of our European polystyrene capacity. This shutdown is expected to reduce fixed costs by about \$2 million annually and improve the efficiency of the Breda facility. We also idled our Carrington, United Kingdom expandable polystyrene, or EPS, facility, resulting in a reduction of 165 million pounds, or 24%, of our European EPS production. This is expected to generate a fixed-cost reduction of approximately \$3 million annually.

## RESULTS OF OPERATIONS—2002 COMPARED TO 2001

Our financial performance in 2002 improved over 2001 but remained challenging due to continued excess supply in our Olefins/Polyolefins and Styrenics businesses. While lower average prices led to lower revenues during 2002, overall demand for our products increased, which lead to higher sales volumes and higher margins. Total revenue decreased \$103 million, or 3%, from \$3,194 million in 2001 to \$3,091 million in 2002. However, lower average feedstock prices combined with improved volumes resulted in our EBITDA increasing by \$153 million, or 247%, from \$62 million in 2001 to \$215 million in 2002. Our net loss to common shareholders decreased to \$112 million in 2002 from a \$161 million loss in 2001. Similarly, our net loss to common shareholders before unusual items decreased to a \$106 million loss from a \$202 million loss in 2001. For a discussion of unusual items, see "Supplemental Earnings Measures."

### *Olefins/Polyolefins Segment*

Polyethylene sales volumes for 2002 and 2001 follow:

(MILLIONS OF POUNDS)	2002	2001
NOVAPOL® Resins		
Joffre LLDPE	1,229	1,129
Moore LDPE	265	265
Moore HDPE	349	381
SCLAIR® Resins	592	617
Advanced SCLAIRTECH™ technology resins	410	188
Total	2,845	2,580

**Revenues ~** Revenues from our Olefins/Polyolefins business decreased \$84 million, or 4%, from \$2,014 million in 2001 to \$1,930 million in 2002. The decrease was primarily due to lower average sales prices. Our North American sales volumes were up approximately 15% and international sales volumes were down approximately 16%. The net result for our 2002 polyethylene sales volumes was a 10% increase over 2001 levels. The majority of this increase was from the sales of Advanced SCLAIRTECH technology resins in the United States.

**Feedstock and Operating Costs ~** Feedstock and operating costs decreased \$135 million, or approximately 9%, from \$1,581 million in 2001 to \$1,446 million in 2002. Average prices for natural gas and crude oil were flat to down versus 2001 levels. Despite additional costs for the Advanced SCLAIRTECH technology polyethylene plant, our fixed costs declined due to other cost reduction efforts.

**Segment EBITDA ~** In our Olefins/Polyolefins business, segment EBITDA, or operating income before depreciation and amortization, increased \$44 million, or 23%, from \$189 million in 2001 to \$233 million in 2002. The increase resulted from higher sales volumes. While average margins were similar in both 2001 and 2002, the trends were quite different. During 2001, margins deteriorated through the year, bottoming out in the fourth quarter. In 2002, margins generally increased through the first three quarters, but fell off somewhat in the fourth quarter.

The following table provides a reconciliation from operating income to EBITDA.

(MILLIONS OF DOLLARS)	2002	2001
Operating income	\$ 67	\$ 57
Depreciation and amortization	166	132
EBITDA	\$233	\$189

**Net Loss ~** Our Olefins/Polyolefins business reported a net loss of \$5 million in 2002, compared to a net loss of \$2 million in 2001. Total ethylene and polyethylene sales volumes were up 11% over 2001. The 2002 results were impacted by higher depreciation costs due to the full year operation of our new Advanced SCLAIRTECH technology polyethylene plant.

In response to higher feedstock prices, we withdrew a polyethylene temporary voluntary allowance in January 2003, making a previously announced price increase effective immediately. In addition, we announced several price increases, which are scheduled to take effect in the first quarter of 2003. Implementation of announced price increases depends on many factors, including feedstock costs, market conditions and the supply/demand balance for each particular product. Successful price increases are typically phased in over several months, vary from grade-to-grade, and can be reduced in magnitude during the implementation period. Benchmark price indices sometimes lag behind price increase announcements due to the timing of publication.

Ethylene operating rates are expected to increase because no significant new capacity is expected before 2005. During 2003, approximately 6% of North American ethylene capacity is expected to be lost to planned turnarounds. In addition, The Dow Chemical Company has announced that they will close two of their higher-cost ethylene plants, representing 2.5 billion pounds, or 3%, of North American ethylene capacity, by the end of 2003. Polyethylene producer inventories and customer inventories are at low levels and feedstock costs remain high, which are expected to support recent price increase announcements. The improvement of industrial production, combined with little new North American capacity in the next three years, is expected to improve operating rates further.

### *Styrenics Segment*

Styrenics sales volumes for 2002 and 2001 follow:

(MILLIONS OF POUNDS)	2002	2001
Styrene monomer <sup>(1)</sup>	1,256	1,014
Polystyrene	2,180	2,282
High performance styrenics including DYLARK and other	281	314
Total	3,717	3,610

<sup>(1)</sup> Third party sales only.

**Revenues ~** Revenues from our Styrenics business decreased \$9 million, or 1%, from \$1,314 million in 2001 to \$1,305 million in 2002. While styrenics prices in many segments increased year over year, the product mix across our Styrenics portfolio offset these increases. Total styrenics sales volumes in 2002, including both styrene monomer and styrenic polymers, were up 3% from 2001. Sales volumes of our styrenic polymers were lower in 2002 than in 2001.



**Feedstock and Operating Costs** ~ Feedstock and operating costs decreased \$105 million, or approximately 8%, from \$1,320 million in 2001 to \$1,215 million in 2002. Benzene marker prices in North America rose over 97% from a low of \$0.70 per gallon at the end of 2001 to \$1.38 per gallon at the end of 2002. Although benzene benchmark prices increased year over year, our realization of the full amount of this cost is delayed, since we use a FIFO inventory costing methodology. Average benchmark prices for ethylene decreased from \$0.26 in 2001 to \$0.22 in 2002.

**Segment EBITDA** ~ In our Styrenics business, segment EBITDA in 2002 was a loss of \$18 million versus a loss of \$127 million in 2001. The improvement over 2001 was due mainly to higher margins resulting from higher industry capacity utilization rates and lower average feedstock costs. In addition to better margins, our Styrenics business improved its performance by implementing several cost cutting initiatives, including asset rationalization and restructurings.

The following table provides a reconciliation from operating income to EBITDA.

(MILLIONS OF DOLLARS)	2002	2001
Operating income	<b>\$(118)</b>	\$(225)
Depreciation and amortization	<b>100</b>	98
EBITDA	<b>\$ (18)</b>	\$(127)

Due to higher industry utilization rates, 2002 was a stronger year for styrene monomer. In 2001, market conditions for styrene monomer were weak, and we were forced to reduce our own styrene monomer production to meet minimum purchase obligations. This resulted in higher fixed costs per pound on our produced styrene monomer. In addition, we sold higher cost purchased monomer into a weak styrene monomer market. The negative impact on margins was approximately \$65 million in 2001. In 2002, we did not reduce monomer production rates in our plants to meet minimum supply obligations so the impact of our long styrene monomer position was neutral.

**Net Loss** ~ Our Styrenics business recorded a net loss of \$102 million in 2002, compared to a net loss of \$181 million in 2001. Margins improved in 2002, as feedstock costs were lower than 2001. In addition, we achieved \$9 million (after-tax) in synergies related to Shell's European solid polystyrene and expandable polystyrene businesses acquired in 2000.

In the first quarter of 2003, our Styrenics business announced several price increases in response to rising feedstock costs. These price increases, which we expect to implement in the first quarter of 2003, were announced for styrene monomer and effectively all of our styrenic polymer product lines in North America and Europe. Implementation of announced price increases depends on many factors, including feedstock costs, market conditions and the supply/demand balance for each particular product. Successful price increases are typically phased in over several months, vary from grade-to-grade, and can be reduced in magnitude during the implementation period. Benchmark price indices sometimes lag behind price increase announcements due to the timing of publication. Polystyrene producer and customer inventories are at low levels and feedstock costs remain high, providing producers with support for recent price increase announcements.

In addition to the capacity that we closed or idled in 2001 and 2002, in January 2003, we acquired the polystyrene customer list from Deltech Polymers Corporation when they chose to cease production of 140 million pounds of polystyrene, removing an additional 2% of North American production capacity. We are supplying their customers from our existing facilities. BASF also announced North American polystyrene capacity reductions of 12%, or an additional 2.4% of total North American capacity.

In 2002, global styrene monomer operating rates averaged 90% of nameplate capacity due to several planned and unplanned outages during the year. In comparison, the rates in 2001 and 2000 were 88% and 91%, respectively. Operating rates in 2002 were similar to 2000 when our styrene monomer business experienced relatively high margins. However in 2002, margins expanded in the first half of the year on a tighter supply/demand balance but could not withstand the rapidly increasing benzene prices and weaker demand in the second half of year. Global polystyrene operating rates were 80% in 2002 compared to 75% in 2001. Inventory levels of styrene monomer were very low at the end of 2002 due to inventory depletion which occurred throughout the supply chain in the second half of 2002.

#### *Other Items*

The following items have not been discussed in the Olefins/Polyolefins or the Styrenics business segments.

**Methanex Investment** ~ Our share of Methanex's earnings before unusual items was \$32 million in 2002, compared with \$14 million in 2001. Our share of Methanex's earnings after unusual items was \$5 million in 2002, compared to \$11 million in 2001. This includes unusual items of \$27 million in 2002 and \$3 million in 2001. Global methanol prices improved throughout 2002, and the market remained tight. Supply limitations and a recovery in demand contributed to higher methanol prices in the second half of the year.

#### **Methanex Investment**

(MILLIONS OF DOLLARS)	2002	2001
Equity earnings (after-tax)	<b>\$ 32</b>	\$14
Unusual items (after-tax)	<b>(27)</b>	(3)
Net equity earnings	<b>\$ 5</b>	\$11

**Other Operating Expenses** ~ Depreciation and amortization expense increased by \$36 million, or 16%, from \$230 million in 2001 to \$266 million in 2002. The increase was primarily the result of additional depreciation associated with the full year operation of our new Advanced SCLAIRTECH technology polyethylene plant and related infrastructure. Selling, general and administrative expenses decreased \$15 million, or 8%, from \$191 million in 2001, to \$176 million in 2002 due to continued cost reduction and streamlining efforts. Research and development expenses decreased slightly from \$40 million in 2001 to \$39 million in 2002.

**Restructuring and Other Unusual Items** ~ Unusual items in 2002 consisted of a gain on the sale of our interest in the Cochin Pipeline, restructuring charges related to streamlining our operations, our proportional share of a Methanex write-down associated with a plant closure, and benefit from a reduction of an accrual for site restoration costs. The net amount of these unusual items was a \$6 million loss in 2002. This compares with an unusual gain of \$41 million in 2001 relating primarily to an IRS settlement and the effect of legislated reductions in Canadian tax rates.

**Interest Expense (Net)** ~ Net interest expense decreased slightly from \$88 million in 2001 to \$87 million in 2002. A decrease in interest expense due to a reduction in outstanding debt was largely offset by an increase due to not capitalizing interest in 2002. In 2001, we capitalized \$18 million of interest costs relating to the Joffre expansion.

**Income Taxes** ~ Income tax recoveries declined to \$13 million in 2002 from \$83 million in 2001 due to reduced losses in 2002 as well as additional tax benefits from unusual items in 2001.

### *Net Loss*

For 2002, we reported a net loss of \$81 million, compared to a net loss of \$128 million in 2001. Our financial performance in 2002 improved over 2001 but remained challenging due to continued excess supply in our Olefins/Polyolefins and Styrenics businesses. During 2002, demand for our products increased, leading to higher sales volumes and higher margins.

### **RESULTS OF OPERATIONS—2001 COMPARED TO 2000**

Our financial performance in 2001 declined significantly from 2000 due to weak customer demand and soft sales volumes in our Olefins/Polyolefins and Styrenics businesses. These factors forced cuts in prices to maintain market share, which coupled with volatile feedstock pricing, resulted in margin decline of \$663 million in 2001, compared to the margin improvement of \$307 million in 2000. Total revenue decreased \$722 million, or 18%, from \$3,916 million in 2000 to \$3,194 million in 2001. Our EBITDA decreased \$658 million, or 91%, from \$720 million in 2000 to \$62 million in 2001. Our net loss to common shareholders decreased to \$161 million in 2001 from income of \$266 million in 2000. Our net loss to common shareholders before unusual items was \$202 million in 2001, compared to net income of \$287 million in 2000. See "Supplemental Earnings Measures."

#### *Olefins/Polyolefins Segment*

Polyethylene sales volumes for 2001 and 2000 follow:

(MILLIONS OF POUNDS)	2001	2000
NOVAPOL Resins		
Joffre LLDPE	1,129	1,327
Moore LDPE	265	318
Moore HDPE	381	452
SCLAIR Resins	617	603
Advanced SCLAIRTECH technology resins	188	—
Total	2,580	2,700

Revenues ~ Revenue from our Olefins/Polyolefins business decreased \$214 million, or 10%, from \$2,228 million in 2000 to \$2,014 million in 2001. The decrease was primarily due to lower average sales prices. Total 2001 polyethylene sales volumes were down 4% from 2000 due to slowing demand. Overall, polyethylene volumes in North America were up 3% and international volumes were down 44%.

Feedstock and Operating Costs ~ Feedstock and operating costs increased \$170 million, or 12%, from \$1,411 million in 2000 to \$1,581 million in 2001. Higher natural gas and utility costs, coupled with lower co-product pricing, more than offset any benefit of lower crude oil costs.

Segment EBITDA ~ In our Olefins/Polyolefins business, segment EBITDA decreased \$336 million, or 64%, from \$525 million in 2000 to \$189 million in 2001. Demand for polyethylene started to fall off in 2000. The effects of slowing demand were compounded by new ethylene and polyethylene capacity and record high feedstock costs in the first part of the year. In addition, results for the second half of the year reflect our new Advanced SCLAIRTECH technology polyethylene plant costs. The plant focused on new product development and commercialization and did not produce maximum volume.



The following table provides a reconciliation from operating income to EBITDA.

(MILLIONS OF DOLLARS)	2001	2000
Operating income	\$ 57	\$439
Depreciation and amortization	132	86
EBITDA	\$189	\$525

**Net Loss ~** Our Olefins/Polyolefins business recorded a net loss of \$2 million in 2001, compared to net income of \$258 million in 2000. Our Olefins/Polyolefins business experienced approximately \$100 million in additional depreciation, interest and other fixed costs with the completion of the capital expansion at Joffre, Alberta. We ran our third ethylene cracker and our new Advanced SCLAIRTECH technology polyethylene facility at planned start up rates. Margins were also hurt by weak market conditions, which significantly impacted the price we were able to obtain from sales of initial polyethylene production at the new facility.

#### *Styrenics Segment*

Styrenics sales volumes for 2001 and 2000 follow:

(MILLIONS OF POUNDS)	2001	2000
Styrene <sup>(1)</sup>	1,014	1,276
Polystyrene	2,282	2,731
High performance styrenics including DYLARK and other	314	304
Total	3,610	4,311

<sup>(1)</sup> Third party sales only.

**Revenues ~** Revenues from our Styrenics business decreased \$552 million, or 30%, from \$1,866 million in 2000 to \$1,314 million in 2001, reflective of market conditions during 2001. The decrease in revenues was due to both lower volumes and prices. Prices declined in all business areas, and total sales volumes decreased 16% from 2000 levels.

**Feedstock and Operating Costs ~** Feedstock and operating costs decreased \$229 million, or approximately 15%, from \$1,549 million in 2000 to \$1,320 million in 2001. The major drivers in the decline in costs were reduced production and lower sales volumes. Benchmark prices for our major feedstocks, ethylene and benzene, also decreased in 2001, however we did not see the full effect of this decline until 2002 because we use a FIFO inventory-costing methodology.

**Segment EBITDA ~** In our Styrenics business, segment EBITDA in 2001 was a loss of \$127 million versus earnings of \$195 million in 2000. The significant decline from 2000 was in part due to lower volumes. In addition, the margins declined as a result of lower prices and flat feedstocks, as described above.

The following table provides a reconciliation from operating income to EBITDA.

(MILLIONS OF DOLLARS)	2001	2000
Operating income	\$(225)	\$ 93
Depreciation and amortization	98	102
EBITDA	\$(127)	\$195

**Net Income (Loss)** ~ In 2001, our Styrenics business recorded a net loss of \$181 million, compared to net income of \$42 million in 2000. Our Styrenics business experienced lower demand and softening margins throughout the year as a result of ongoing economic weakness in North America and Europe, as well as customer inventory depletion. In 2000, we acquired Shell's European solid polystyrene and expandable polystyrene business. We achieved \$9 million (after-tax) of synergies from this transaction in 2001 with \$13 million (after-tax) achieved against the three-year target of \$19 million (after-tax).

#### *Other Items*

The following items have not been discussed in the Olefins/Polyolefins or the Styrenics business segments.

**Methanex Investment** ~ Our share of Methanex's earnings before unusual items was \$14 million in 2001, as compared to \$23 million in 2000. 2001 results included a \$3 million charge for our portion of a restructuring charge resulting in earnings after unusual items of \$11 million compared with earnings of \$23 million in 2000. Methanol prices improved in the first half of 2001 as the methanol supply/demand balance tightened. By mid-year 2001, demand for methanol, and therefore pricing, began to fall due to the global economic slowdown. In 2001, methanol demand declined by an estimated 5%. The average realized price for methanol fell from a level of \$225 per metric tonne in the first quarter of 2001 to \$115 per metric tonne in the fourth quarter of 2001.

#### **Methanex Investment**

(MILLIONS OF DOLLARS)	2001	2000
Equity earnings (after-tax)	\$14	\$23
Unusual items (after-tax)	(3)	—
Net equity earnings	\$11	\$23

**Other Operating Expenses** ~ Depreciation and amortization expense increased by \$42 million, or 22%, from \$188 million in 2000 to \$230 million in 2001, due to the completion of the Joffre expansion in mid-2001. There was a reduction of \$6 million in selling, general and administration in 2001 due to cost reduction efforts. Research and development expenses increased \$1 million from 2000 due to spending on improving product performance characteristics and production processes.

**Restructuring and Other Unusual Items** ~ Unusual items resulted in a \$41 million net gain (after-tax) in 2001, as compared to a \$21 million net loss in 2000. Unusual items in 2001 included a \$44 million (after-tax) gain regarding settlements with the Internal Revenue Service on foreign tax credits for prior years, a \$17 million benefit related to the impact of legislated reductions in Canadian provincial income tax rates on future tax liabilities, a fourth quarter \$17 million (after-tax) charge related to restructuring and our proportional share of a Methanex plant write-down. Our restructuring charge in 2001 related to employee severance costs, as well as project and other asset write-offs. This charge was significantly lower than the restructuring charge in 2000 of \$71 million (after-tax), which included a plant closure at Joliet, Illinois, other line closures and related employee severance. In 2000, a further \$29 million benefit from reductions in Canadian provincial income tax rates on future tax liabilities and a \$21 million after-tax gain on sale of Dynegy Inc. preferred shares brought the unusual items to a \$21 million net loss.

**Interest Expense (Net)** ~ Net interest expense increased to \$88 million in 2001 from \$45 million in 2000, primarily due to the completion of the Joffre, Alberta expansion. The total interest expense in 2000 was lower because we capitalized interest during the construction period.

**Income Taxes** ~ Income taxes declined by \$214 million in 2001 from an expense of \$131 million in 2000 to a recovery of \$83 million in 2001 due to the significant reduction in earnings from operations during the year.

#### *Net Income (Loss)*

In 2001, we reported a net loss of \$128 million, compared to net income of \$302 million in 2000. Business conditions were difficult in 2001 and reflect the tough environment the chemical industry was experiencing. Weak customer demand and soft sales volumes reduced prices. This, coupled with volatile feedstock pricing, resulted in margin decline of \$663 million in 2001, compared to margin improvement of \$307 million in 2000.

### LIQUIDITY AND CAPITAL RESOURCES

Our principal sources of liquidity are cash flows from operations, accounts receivable securitization programs and borrowings under our revolving credit facility. Our principal uses of cash are capital expenditures and debt service.

#### *Cash Flow*

Funds generated from operations improved significantly from 2001 to 2002. During 2001, we took steps to generate cash and reduce debt. This focus continued into 2002 and resulted in significant reductions in working capital, fixed costs and capital spending. We also sold non-strategic assets, the most significant of which was our 20% interest in the Cochin Pipeline. Additionally, we received a substantial tax refund in 2002. As a result of our improved business performance and our focus on cash flow maximization, we reduced debt by \$307 million during 2002.

A summary of the cash inflows and outflows, which contributed to our debt reduction, is shown below:

(MILLIONS OF DOLLARS)	2002	2001	2000
<b>INFLOWS</b>			
Funds generated from operations	\$ 153	\$ 94	\$ 611
Reduction (increase) in operating working capital	206	184	(260)
Cash generated from operations	359	278	351
Asset sale proceeds	82	—	741
Other	24	39	4
Total inflows	465	317	1,096
<b>OUTFLOWS</b>			
Capital expenditures	(71)	(168)	(440)
Turnaround costs, long-term investments and other assets	(18)	(156)	(8)
Shell acquisition	—	—	(212)
Common share buy-back program	—	—	(150)
Dividends and distributions	(54)	(56)	(59)
Increase in non-operating working capital	(11)	(22)	(187)
Total outflows	(154)	(402)	(1,056)
Reduction (increase) in cash	(4)	17	32
<b>DEBT (ADDITION) REDUCTION</b>	<b>\$ 307</b>	<b>\$ (68)</b>	<b>\$ 72</b>



**Inflows of Cash** ~ Funds from operations improved to \$153 million in 2002 from \$94 million in 2001, but remained substantially below the \$611 million generated in 2000. We reduced operating working capital by \$206 million in 2002 by receiving \$182 million of tax refunds and improving cash flow cycle time, or CFCT, which is measured as operating working capital divided by average daily sales. We reduced our operating working capital requirements from 60 days of sales at the end of 2000, to 39 days of sales at the end of 2001 to 20 days of sales at the end of 2002. If we had maintained our 2001-year-end operating working capital days of sales levels, we would have tied up \$170 million more in operating working capital at the end of 2002. We expect CFCT to average between 25 to 30 days over the long term. We expect to receive approximately \$20 million in tax refunds in early 2003. In total, we generated \$359 million in cash from operations versus \$278 million in 2001 and \$351 million in 2000.

We also received \$82 million of cash from the sale of non-strategic assets during 2002. The sale of our 20% interest in the Cochin Pipeline generated \$64 million and other asset sales contributed \$18 million.

In the third quarter of 2002, Methanex announced the commencement of a regular quarterly dividend to shareholders of \$0.05 per share. We received approximately \$4 million in the second half of the year from this regular dividend. On January 27, 2003, Methanex also announced a special dividend of \$0.25 per share. Our share was approximately \$12 million and was received on February 14, 2003. This is the first special dividend that Methanex has issued and is reflective of a strong methanol market. These dividend payments will have no tax impact because dividends from one taxable Canadian company to another taxable Canadian company are tax-free. In accordance with standard equity accounting, the receipt of this dividend was recorded as a reduction in our investment in Methanex.

We received \$33 million in cash related to the margin account for the retractable preferred shares (see Note 12 to the consolidated financial statements). The amount of restricted cash required to be on deposit is dependent upon the market value of our 9.04% and 9.50% preferred securities.

**Outflows of Cash** ~ We reduced our capital spending program to \$71 million during 2002 compared to the \$168 million spent in 2001 and the \$440 million spent in 2000. If business conditions improve, we will have a capital spending program of between \$125 million to \$150 million in 2003 focused primarily on sustaining capital and small growth projects. We also spent \$27 million in 2002 on scheduled maintenance of plants, known as turnarounds. We expect to spend approximately \$18 million on scheduled turnarounds in 2003.

#### *Commitments*

We have various commercial commitments, including operating leases for office space and railcars and unconditional purchase obligations related to minimum amounts of feedstock and other raw materials purchased pursuant to agreements entered into to secure short and long-term supply. While we have some fixed price raw materials agreements, prices are typically based on market or a cost plus basis and fluctuate with changes in the underlying raw material indices. Obligations have been calculated using year-end pricing for purposes of the chart on the following page.

**Contractual Cash Obligations**

(MILLIONS OF DOLLARS)	PAYMENTS DUE BY PERIOD				
	TOTAL	2003	2004–2005	2006–2007	AFTER 2007
Long-term debt <sup>(1)</sup>	\$1,215	\$ 4	\$ 102	\$ 304	\$ 805
Operating leases <sup>(2)</sup>	536	41	77	68	350
Unconditional purchase obligations <sup>(3)</sup>	6,650	1,477	1,285	1,148	2,740
Total contractual cash obligations	\$8,401	\$1,522	\$1,464	\$1,520	\$3,895

<sup>(1)</sup> Includes current portion and bank loans.

<sup>(2)</sup> Includes property, railcar and other equipment.

<sup>(3)</sup> We could mitigate the impact of excess quantities of raw materials and feedstock commodities resulting from fixed purchase commitments by reselling these products at market prices.

**Liquidity**

We meet our short-term liquidity needs through cash flows from operations, our accounts receivable securitization programs and borrowings under our revolving credit facility. In addition, we continue to consider the sale of certain non-strategic assets.

**Credit Facility ~** We have a two-year committed revolving credit facility of \$310 million expiring April 3, 2004. Financial covenants related to this facility are as follows:

COVENANT	REQUIREMENT
Minimum EBITDA to Interest: <sup>(1)</sup>	
12 months ending December 31, 2002	0.75 : 1.0
12 months ending March 31, 2003	1.50 : 1.0
12 months ending June 30, 2003	2.00 : 1.0
12 months ending September 30, 2003	2.50 : 1.0
12 months ending December 31, 2003	3.00 : 1.0
12 months ending March 31, 2004	3.50 : 1.0
Maximum Debt to Total Capitalization:	55%
Minimum Shareholders' Equity:	\$1.4 billion plus 50% of positive earnings

<sup>(1)</sup> Interest includes preferred share dividends and distributions.

At December 31, 2002, we had \$20 million of letters of credit outstanding under the revolving credit facility, and \$290 million of available borrowing capacity. We are in compliance with all covenants under the revolving credit facility. We are currently in discussions with the bank syndicate for purposes of amending and extending this credit facility.

**Accounts Receivable Securitization ~** Our off-balance sheet financing activities are limited to participation in accounts receivable securitization programs. We have been engaged in the current programs since 1999. The programs were renewed during 2002 until September 23, 2003. We sell trade accounts receivable to third parties, on a revolving basis, to a maximum of \$195 million (see Note 4 to the consolidated financial statements). At December 31, 2002, \$163 million in receivables were sold under the programs. Of this amount, \$103 million was sold via a special purpose entity, or SPE, that is 100% owned by us. The SPE isolates the sold receivables and the related cash collections for the exclusive benefit of the purchasers. We have no right to any cash collected from these receivables; therefore, neither the receivables nor any obligation to the purchasers is reflected in our financial statements. We conduct no other business through SPEs.

**Total Return Swap** ~ In connection with the acquisition of styrenics assets from Huntsman Corporation on December 31, 1998, our subsidiary, NOVA Chemicals Inc., issued retractable preferred shares with a liquidation preference of \$198 million as partial consideration. Holders of the retractable preferred shares have the right to exchange the shares (a "retraction") for our common shares (plus preferred shares if the market value of such common shares is less than \$198 million).

During 2001 and 2002, certain changes were made to the terms of the retractable preferred shares and related stockholder agreements giving us the right to call the retractable preferred shares on or after December 15, 2001. These changes effectively provide us with the right to repurchase the retractable preferred shares prior to any retraction into our common shares. If we do not exercise our repurchase rights prior to October 1, 2003, the market-based exchange rate at which the retractable preferred shares may be retracted into our common shares (and, accordingly, the effective price at which the common shares would be issued) will be fixed on that date. The number of our common shares issuable upon a retraction remains limited to a maximum of 8.5 million shares with the balance of the obligation, if any, met through the issuance of preferred shares. The dividend rate on the retractable preferred shares is 2% per year.

Coincident with making the above changes, we entered into a total return swap, which terminates on October 1, 2003, with respect to the retractable preferred shares. Under the terms of the total return swap: (i) the counterparty pays us the total return on the retractable preferred shares (dividends plus positive changes in equity value of the preferred shares, capped at \$191 million until termination or sale at which time any such positive changes are not capped) and (ii) we pay the counterparty a spread to LIBOR as well as any negative changes in the equity value of the retractable preferred shares.

We are obligated under the swap to provide margin (cash, government securities or a letter of credit) equal to 20% of the original notional amount of \$191 million, which is currently satisfied by a letter of credit. In addition, we are also obligated under the swap to provide margin equal to the difference between the original notional amount and the current notional amount of \$180 million, which will be reduced to \$126 million as of April 1, 2003. This margin is currently satisfied by posting restricted cash. If the equity value of the retractable preferred shares decreases by 5% or more at any time, we are required to post additional margin. If the equity value of the retractable preferred shares increases by 5% or more, any excess collateral will be returned to us. Changes in equity value of the retractable preferred shares during the term of the swap will be determined based on changes in the average price of the outstanding 9.04% and 9.50% preferred securities issued by us.

If we default on other debt with an aggregate principal amount of \$25 million or more or the closing price of our common shares is \$15.00 or less or upon certain other credit events, the counterparty will have the right to sell the retractable preferred shares to a third party and terminate the swap. We would then owe the counterparty the difference between the actual sale price received by the counterparty and the most recent adjusted notional equity value of the retractable preferred shares (in the event the difference was negative). Subsequent to the termination of the swap, we may, at our option, repurchase the retractable preferred shares for \$198 million plus accrued and unpaid dividends.



### Capitalization

Our debt to total capitalization declined in 2002 to 43.8% from 48.5% in 2001. Our target is to average about 40% debt to total capitalization over the course of the commodity chemical cycle. Under Canadian GAAP, our preferred securities due 2047 and 2048 are accounted for as equity.

We had only \$4 million of current debt outstanding at December 31, 2002. Our \$150 million of 7% debentures due August 15, 2026 are putable to us at par at the option of the holders on August 15, 2003, but continue to be classified as long-term debt as we have sufficient capacity available on our long-term credit facility to repay these debentures should the holders exercise their option.

### Financial Ratios

DECEMBER 31 (MILLIONS OF DOLLARS, EXCEPT WHERE NOTED)	2002	2001	2000
Long-term debt <sup>(1)</sup>	<b>\$1,215</b>	\$1,522	\$1,451
Shareholders' equity	<b>1,561</b>	1,614	1,926
Total capitalization	<b>\$2,776</b>	\$3,136	\$3,377
Debt to total capitalization	<b>43.8%</b>	48.5%	42.9%
Interest coverage (deficiency) on long-term debt <sup>(2)</sup>	<b>(0.1)x</b>	(1.7)x	4.8x

<sup>(1)</sup> Includes current portion and bank loans.

<sup>(2)</sup> Interest coverage (deficiency) on long-term debt is equal to net income (loss) before interest expense on long-term debt and income taxes divided by annual interest requirements on long-term debt.

### Credit Ratings

Our current senior unsecured debt ratings are as follows: DBRS – BBB (low)(stable); Standard & Poor's – BB+ (stable); and Moody's – Ba2 (stable). During 2002, Moody's and Standard & Poor's downgraded our credit ratings. Moody's lowered our corporate credit rating to Ba2 from Baa3 and Standard & Poor's lowered our rating to BB+ from BBB-. Both Moody's and Standard & Poor's changed their outlook from negative to stable. The downgrades had no material impact on any of our lending arrangements.

### SUPPLEMENTAL EARNINGS MEASURES

In addition to providing earnings measures in accordance with Canadian GAAP, we present certain supplemental earnings measures. These are earnings before interest, taxes, depreciation and amortization (EBITDA) and net income (loss) to common shareholders before unusual items. These measures do not have any standardized meaning prescribed by Canadian GAAP and are, therefore, unlikely to be comparable to similar measures presented by other companies.

#### EBITDA

This measure is provided to assist investors in determining our ability to generate cash from operations. EBITDA can be determined from the consolidated statements of income (loss) by adding back income taxes, interest expense, other gains, equity in the earnings (losses) of affiliates, depreciation and amortization and restructuring charges to net income (loss).

#### Net Income (Loss) to Common Shareholders Before Unusual Items

This measure is provided to assist investors in assessing earnings performance from ongoing operations. Certain items such as gains and losses from sales of assets and restructuring charges are excluded if they are not considered to be in the ordinary course of business. A listing of unusual items (after-tax) for the periods presented is as follows:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Net income (loss) to common shareholders before unusual items	<b>\$(106)</b>	\$(202)	\$287
Unusual items:			
Restructuring charges	<b>(15)</b>	(17)	(71)
Tax settlements with IRS	—	44	—
Methanex asset write-down and restructuring charges	<b>(27)</b>	(3)	—
Reductions in income tax rates on future tax liabilities	—	17	29
Gain on sale of Dynegy Inc. preferred shares	—	—	21
Gain on sale of assets	<b>36</b>	—	—
Total unusual items	<b>\$ (6)</b>	\$ 41	\$(21)
Net income (loss) to common shareholders after unusual items	<b>\$(112)</b>	\$(161)	\$266

### *Changes to Supplemental Earnings Measures in 2003*

Effective March 28, 2003, new SEC rules with respect to non-GAAP financial measures will come into effect. These rules will not permit the exclusion of certain items when presenting non-GAAP financial measures. Had we been following these rules during the periods presented in this report, the following items would not be excluded when presenting EBITDA and net income (loss) to common shareholders before unusual items: restructuring charges, tax settlements with IRS, Methanex asset write-down and restructuring charges, and reductions in income taxes on future tax liabilities. Accordingly, the following amounts would have been reported:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
EBITDA	<b>\$ 195</b>	\$ 35	\$602
Net income (loss) to common shareholders before unusual items	<b>\$(148)</b>	\$(161)	\$245
Earnings (loss) per share before unusual items:			
—Basic	<b>\$(1.71)</b>	\$(1.89)	\$2.76
—Diluted	<b>\$(1.71)</b>	\$(1.89)	\$2.49

## **DIVIDENDS AND DISTRIBUTIONS**

### *Common Share Dividends*

Historically, we have paid dividends on our common shares at the rate of \$0.10 Canadian dollars per quarter. In 2002, we paid \$23 million in dividends on our common shares. There are currently no material contractual restrictions on our ability to declare and pay dividends on our common shares. The declaration and payment of dividends is at the discretion of our Board of Directors, which will consider earnings, capital requirements, our financial condition and other relevant factors. It is, however, our intention to retain most of our earnings to support current operations, further reduce our debt, and continue to pay dividends at historic levels.

### *Preferred Securities Distributions*

We pay distributions on our preferred securities on a quarterly basis, at an annual rate of 9.50% on the \$210 million of preferred securities due 2047 and 9.04% on the \$172.5 million of preferred securities due 2048. We have the right to redeem the preferred securities at any time on or after October 22, 2003 and January 26, 2004, respectively. Distributions are tax deductible and deducted from income when determining diluted earnings per share. We have the right, under certain conditions, to elect to defer payment of distributions on the securities for up to 20 consecutive quarterly periods. No distributions have been deferred to date.

*Retractable Preferred Share Dividends*

We pay 2% annual dividends on the \$198 million retractable preferred shares. These dividends are deducted from income when determining diluted earnings per share. Holders of the retractable preferred shares have the right to exchange the shares (a “retraction”) for our common shares (plus preferred shares if the market value of such common shares is less than \$198 million).

The market based exchange rate at which the retractable preferred shares may be retracted into our common shares (and accordingly the effective price at which the common shares would be issued) will be determined on October 1, 2003.

**APPLICATION OF CRITICAL ACCOUNTING ESTIMATES**

The SEC recently issued a new rule, “Application of Critical Accounting Policies,” which requires companies to provide additional disclosure and commentary on those accounting estimates considered most critical to the application of their accounting policies. This rule considers accounting estimates to be critical if they are important to the company’s financial condition and results, and require significant judgment and estimation on the part of management in their application.

We believe the following represent the estimates most critical to the application of our accounting policies. Management has discussed the development and selection of these critical accounting estimates with the Audit, Finance and Risk Committee of our Board of Directors and the Audit, Finance and Risk Committee has reviewed our disclosure relating to such estimates in this Management Discussion and Analysis of Financial Condition and Results of Operations.

*Plant, Property and Equipment (PP&E)*

A judgmental aspect of accounting for PP&E involves determining whether an impairment of our assets exists. This assessment is critical due to its potential impact on our earnings. Canadian and United States accounting standards require that if the sum of the future cash flows together with the residual value expected to result from a company’s assets, undiscounted and without interest charges, is less than the reported value of the asset, an asset impairment must be recognized in the financial statements by a charge to earnings.

Our Olefins/Polyolefins business has an established long-term record of profitability and, based on current asset carrying values and expected future cash flows, we have concluded the carrying value of its assets is appropriate.

Our Styrenics business has not been as profitable and has recently reduced production capacity due to poor market conditions, temporarily idled the EPS units at our Carrington, United Kingdom plant as well as shut down several reactors in Europe and North America. We determined that the undiscounted sum of the expected future cash flows from our Styrenics plants significantly exceeded the recorded value of those plants, so we did not recognize impairment in accordance with Canadian and U.S. GAAP.

Our estimate of future cash flows is based on historical operating performance and the assumption that the business cycle pattern will continue in the future. Historically, there have been peaks in earnings performance, characterized by a tight supply/demand balance and improving margins, followed by trough periods when supply exceeds demand and lower margins result. We have assumed that we will earn margins in the future that are similar to margins earned in the past and that we will have a similar cost structure.

In addition, we are able to choose from alternative methods of depreciation. We have chosen the straight-line method rather than other methods, such as unit of production, because the straight-line method is more conservative and requires less estimation and judgment.



### *Environmental Liabilities*

Canadian GAAP requires companies to provide for future plant decommissioning and site restoration costs through charges to income when those costs are reasonably determinable. We accrue these costs for active plants and those plants no longer used in our operations. At December 31, 2002, we had \$29 million of accumulated reserve for these activities.

Decommissioning and site restoration costs for plant sites that have been divested or are no longer in use are expected to be approximately \$12 million. We have fully reserved for these costs and believe the reserve to be adequate.

For currently operating plant sites, approximately \$17 million has been accrued in anticipation of potential plant decommissioning and site restoration. We have undertaken a preliminary evaluation of the costs to conduct decommissioning and site restoration required to satisfy our commitments to Responsible Care®, contractual requirements and environmental legislation upon termination of operations at these plant sites.

Based upon the preliminary evaluation, we anticipate that a further \$59 million may be required to decommission and restore all operating plants following termination of operations. Since these plants may be in operation in excess of 40 years, significant uncertainty exists concerning the nature of the decommissioning and site restoration activities that may be required. Furthermore, significant judgment is involved in the estimation process, since the value of salvage, degree of natural attenuation, evolution of new technologies and potential future land uses may mitigate future environmental liabilities and potential costs.

In aggregate, we have estimated \$88 million may be required to complete all decommissioning and restoration activities, net of salvage value. We are accruing this liability evenly over the remaining useful life of the plants, resulting in an annual charge to income of approximately \$2 million.

### *Pensions*

Canadian GAAP requires that actuarial gains and losses be recognized in our income using a systematic and consistent methodology. We have chosen to amortize such gains and losses over the estimated remaining service lifetime of the employee group to the extent these gains or losses exceed 10% of the greater of the accrued benefit obligation or market value of assets. We chose this alternative because it avoids recognizing into income large unrealized gains or losses in individual years. Immediate recognition of such gains and losses would introduce misleading volatility into our earnings. Cumulative unrealized actuarial gains and losses have ranged from a \$61 million gain at December 31, 1999 to a \$105 million loss at December 31, 2002.

We also make assumptions concerning factors such as mortality, termination, retirement, rate of increase in future compensation and discount rate, as well as the expected return on plan assets. These assumptions can impact our pension obligations and pension expense. We use the latest published mortality rate tables and select other assumptions in line with our actual experience. The expected return on plan assets reflects our estimate of asset returns over the life of the pension plans, not our actual return in any given year. Changes in these assumptions would need to be dramatic to cause a material impact to our pension obligation or pension expense amounts. For example, a 1% change in the expected return on plan assets would only impact earnings by approximately \$2 million after-tax.

We contributed \$11 million to all of our defined benefit pension plans in 2002 based on valuations filed with various pension regulators in various countries. Funding for our pension plans is largely driven by the Canadian pension plans since they constitute the vast majority of our pension plan assets and obligations. Since we are not required to file another valuation with the pension regulators in Canada until 2005, we do not anticipate our 2003 contributions will vary significantly from 2002 levels. If equity markets do not recover by 2005, we will be required to increase our contributions at that time.

## ACCOUNTING STANDARDS

On January 1, 2002, we adopted the following new accounting standards as prescribed by the Canadian Institute of Chartered Accountants:

### *Stock-Based Compensation and Other Stock-Based Payments*

The new recommendations encourage, but do not require, the use of the fair-value based method to account for stock-based awards granted to employees. We chose not to apply the fair-value method and continue to use the intrinsic-value method, where compensation expense, if any, is measured based on the excess of the market price of the stock over the option's exercise price on the date of grant. As options are generally granted at the market price on the date of grant, no compensation cost results. See Note 14 to our consolidated financial statements for the pro forma amounts that would have resulted had compensation expense for stock options been determined based on the fair-value method.

### *Foreign Currency Translation*

The new recommendations eliminated the deferral and amortization of unrealized translation gains and losses on foreign denominated monetary items with a fixed life. Our Canadian denominated debt is designated as a partial hedge of our Canadian assets, and the resulting unrealized foreign exchange gains or losses are deferred in a separate component of shareholders' equity entitled "cumulative translation adjustment."

### *Goodwill and Other Intangible Assets*

The new recommendations require that new and existing goodwill and indefinite life intangible assets be tested annually for impairment, and not be subject to amortization. Intangible assets with a finite useful life are subject to amortization over their useful life. Our prior business combinations did not result in any goodwill being recorded and our intangible assets are primarily comprised of patents with finite useful lives.

The adoption of these standards had no significant effect on our financial position or results of operations. At present, no new Canadian accounting standards will require implementation that would materially impact our financial statements in 2003.

## DISCLOSURE OF MARKET AND REGULATORY RISK

The Audit, Finance and Risk Committee of our Board of Directors regularly reviews foreign exchange, interest rate and commodity hedging activity and monitors compliance with our hedging policy. Our policy prohibits the use of financial instruments for speculative purposes and limits hedging activity to the underlying net economic exposure.

For further details on our hedging activities, see Note 23 to the consolidated financial statements.

### *Foreign Exchange Hedging*

We conduct business in various countries where certain revenues and expenses are determined in currencies other than the U.S. dollar. See chart under “Factors Affecting Financial Performance” on page 38 for our exposure to the Canadian dollar and Euro. Our earnings exposure to the Canadian dollar is hedged, through March 2003, with forward contracts to fix the exchange rate. The Canadian dollar averaged \$0.64 per U.S. dollar in 2002, which was lower than the fixed rates in the forward contracts. As a result, after-tax earnings in 2002 were \$33 million lower than they would have otherwise been.

The remaining \$100 million of forward contracts in the program at December 31, 2002 will mature during the first quarter of 2003. The unrecognized after-tax mark-to-market loss on these hedges is \$7 million based on a 63¢ Canadian dollar on December 31, 2002. We do not intend to renew this hedging program.

We have not hedged our exposure to fluctuations in the Euro.

### *Commodity Hedging and Feedstock Acquisition*

We manage our exposure to fluctuating commodity prices on our physical feedstock requirements by varying our mix of fixed and floating price contracts and by entering into commodity futures contracts, swaps and options. The extent to which hedging instruments are used depends on market conditions and requires adherence to our hedging policy. We also limit our positions in futures markets to our proprietary feedstock requirements and do not use hedging instruments for speculative purposes.

Our feedstock acquisition team manages our position in the volatile natural gas and crude markets in an effort to moderate the risks of fluctuations in feedstock prices to lower overall feedstock costs. As a result of our hedging activities, after-tax earnings in 2002 increased by \$9 million compared to \$55 million in 2001. On December 31, 2002, the unrecognized after-tax mark-to-market value of all commodity positions was a net gain of \$8 million which includes an \$11 million gain (after-tax) in the fourth quarter from certain natural gas positions. As a result, we received cash payments of \$17 million (before-tax) during the fourth quarter. These gains will be amortized to income over the remaining terms of the related feedstock purchase commitments from January 2003 to March 2005.

57

### *Interest Rate Hedging*

We use interest rate swaps to manage our mix between fixed and floating interest rate exposure. During 2002, we monetized a before-tax gain of \$13 million on swaps entered into in 2001. The gain is being amortized over the life of the series of related debt that extends to May 2006 and April 2009. Of the gain, \$12 million remained deferred at December 31, 2002.

At December 31, 2002, 98% of our debt had fixed interest rates averaging 6.7%; and 2% of our debt had floating interest rates averaging 4.4%.

### *Credit Risk Management*

We are exposed to credit risk on financial instruments given the possibility a counterparty to an instrument in which we are entitled to receive payment of an unrealized gain fails to perform. We only transact with counterparties having an appropriate credit rating for the risk involved. A limit on contingent exposure has been established for each counterparty based on the counterparty's credit rating. Credit exposure is managed through credit approval and monitoring procedures. Counterparty risk is reviewed with the Audit, Finance and Risk Committee.

Concentration of credit risk can result primarily from our receivables, as certain customer groups are located in the same geographic area and operate in the same industry. We manage our credit risk relating to these receivables through credit approval and monitoring procedures.



## 2002 CONSOLIDATED FINANCIAL REPORT

### SELECTED QUARTERLY FINANCIAL INFORMATION

THREE MONTHS ENDED (UNAUDITED; MILLIONS OF U.S. DOLLARS, EXCEPT PER SHARE AMOUNTS)	2002				2001			
	MAR 31	JUNE 30	SEPT 30	DEC 31	MAR 31	JUNE 30	SEPT 30	DEC 31
<b>OPERATING RESULTS</b>								
Revenue	\$ 662	777	806	846	\$ 964	833	743	654
Operating income (loss)	\$ (53)	1	(1)	(18)	\$ (4)	(11)	(80)	(100)
Net income (loss)	\$ (23)	(14)	(5)	(39)	\$ 24	3	(57)	(98)
Earnings (loss) per share								
—Basic	\$(0.35)	(0.25)	(0.14)	(0.56)	\$0.18	(0.07)	(0.76)	(1.23)
—Diluted	\$(0.35)	(0.25)	(0.14)	(0.56)	\$0.17	(0.07)	(0.76)	(1.23)
Weighted-average common shares outstanding (millions)	86.0	86.3	86.4	86.5	84.9	85.3	85.7	85.7

## CONSOLIDATED SIX-YEAR REVIEW

(MILLIONS OF U.S. DOLLARS, EXCEPT PER SHARE AMOUNTS, RATIOS AND MISCELLANEOUS DATA) <sup>(1)</sup>						
	2002	2001	2000	1999	1998	1997
<b>OPERATING RESULTS</b>						
Revenue	\$3,091	3,194	3,916	2,808	2,075	2,285
Operating income (loss)	\$ (71)	(195)	414	305	103	229
Net income (loss)	\$ (81)	(128)	302	253	18	111
Total assets	\$4,154	4,359	4,754	4,559	3,580	2,687
<b>CAPITALIZATION</b>						
Current bank loans	\$ 3	14	28	—	—	57
Long-term debt <sup>(2)</sup>	1,212	1,508	1,423	1,525	1,297	726
Shareholders' equity <sup>(3)</sup>	1,561	1,614	1,926	1,964	1,512	1,173
Total capitalization	\$2,776	3,136	3,377	3,489	2,809	1,956
<b>CASH FLOW DATA</b>						
Plant, property and equipment additions	\$ 71	168	440	620	367	223
Cash from operations	\$ 359	278	351	395	198	227
Net debt additions (repayments) <sup>(4)</sup>	\$ (307)	68	(72)	219	502	23
<b>SUPPLEMENTAL EARNINGS MEASURES</b>						
Net income (loss) to common shareholders before unusual items <sup>(5)</sup>	\$ (106)	(202)	287	124	28	152
Net income (loss) to common shareholders after unusual items	\$ (112)	(161)	266	217	16	111
<b>DATA PER COMMON SHARE<sup>(6)</sup></b>						
Earnings (loss) before unusual items <sup>(5)</sup>						
—Basic	\$ (1.24)	(2.37)	3.23	1.34	0.30	1.65
—Diluted	\$ (1.24)	(2.37)	3.06	1.32	0.30	1.65
Earnings (loss) after unusual items						
—Basic	\$ (1.30)	(1.88)	3.00	2.35	0.17	1.21
—Diluted	\$ (1.30)	(1.88)	2.84	2.26	0.17	1.21
Common shareholders' equity at year-end <sup>(3) (7)</sup>	\$12.40	13.05	16.52	15.58	12.96	12.75
<b>RATIOS</b>						
Return on average common equity <sup>(8)</sup>	(10.4)%	(16.5)%	21.2%	9.9%	2.3%	12.2%
Debt to total capitalization <sup>(4)</sup>	43.8%	48.5%	42.9%	43.7%	46.2%	40.0%
Funds flow coverage of financial charges <sup>(9)</sup>	2.7x	1.7x	6.0x	4.2x	3.6x	5.3x
<b>MISCELLANEOUS DATA</b>						
Employees at year-end <sup>(10)</sup>	4,300	4,600	4,700	4,700	4,200	3,400
Closing share price <sup>(11)</sup> TSX (Cdn\$)	28.89	30.75	28.10	28.25	20.00	N/A
NYSE (U.S.\$)	18.30	19.27	18.81	19.31	13.06	N/A

(1) For all periods prior to July 2, 1998, Canadian dollar amounts have been restated in U.S. dollars using an exchange rate of \$1.00 Canadian = U.S. \$0.68.

(2) Includes current portion of long-term debt.

(3) 1997 is net of advances to parent and affiliates.

(4) Includes current bank loans.

(5) Unusual items were \$(6) million in 2002, \$41 million in 2001, \$(21) million in 2000 (see page 53 of the Management Discussion and Analysis for a complete listing). Unusual items were \$93 million in 1999 (\$12 million – restructuring charge, \$(60) million – loss on hedges, \$(19) million – NOVA Chemicals' share of a Methanex restructuring charge, and \$184 million – gain on sale of Dynegy Inc. preferred shares), \$(12) million in 1998 – restructuring charge, \$(41) million in 1997 (\$39) million – NOVA Chemicals' shares of a Dynegy Inc. restructuring charge and \$(2) million – other.

(6) 86 million weighted-average common shares outstanding in 2002 (85 million in 2001, 89 million in 2000, 93 million in 1999, and 92 million in all other comparative periods).

(7) 1998 to 2002, inclusive, assume the retractable preferred shares were exchanged for 8.5 million common shares.

(8) Net income (loss) to common shareholders before unusual items divided by average common equity (excluding preferred securities and retractable preferred shares). 1997 average common equity is net of advances to parent and affiliates.

(9) Funds from operations plus interest expense (net) less interest income divided by gross interest expense.

(10) 1999 includes the addition of Shell employees; 1998 includes the addition of Huntsman employees.

(11) NOVA Chemicals was launched as an independent publicly traded company on July 2, 1998. As a result, no comparable share price information is available prior to that date.

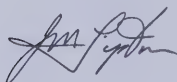
## MANAGEMENT'S REPORT

### *To the Shareholders of NOVA Chemicals Corporation*

The consolidated financial statements and other financial information included in this annual report have been prepared by management. It is management's responsibility to ensure that sound judgment, appropriate accounting principles and methods and reasonable estimates have been used in the preparation of this information. They also ensure that all information presented is consistent.

Management is also responsible for establishing and maintaining internal controls and procedures over the financial reporting process. The internal control system includes an internal audit function and an established business conduct policy that applies to all employees. In addition, the company has adopted a code of ethics that applies to its Chief Executive Officer, Chief Financial Officer and Corporate Controller. The code of ethics can be viewed on NOVA Chemicals' website ([www.novachemicals.com](http://www.novachemicals.com)). Management believes the system of internal controls, review procedures and established policies provide reasonable assurance as to the reliability and relevance of financial reports. Management also believes that NOVA Chemicals' operations are conducted in conformity with the law and with a high standard of business conduct.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control. The Board carries out this responsibility principally through its Audit, Finance and Risk Committee. The Committee, which consists solely of non-management directors, reviews the financial statements and annual report and recommends them to the Board for approval. The Committee meets with management, internal auditors and external auditors to discuss internal controls, auditing matters, and financial reporting issues. Internal and external auditors have full and unrestricted access to the Audit, Finance and Risk Committee. The Committee also recommends a firm of external auditors to be appointed by the shareholders.



Jeffrey M. Lipton  
*President & Chief Executive Officer*



Larry A. MacDonald  
*Senior Vice President & Chief Financial Officer*

March 4, 2003  
Calgary, Canada

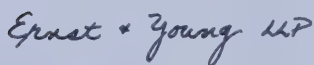
## AUDITORS' REPORT

### *To the Shareholders of NOVA Chemicals Corporation*

We have audited the consolidated balance sheets of NOVA Chemicals Corporation as at December 31, 2002, 2001, and 2000 and the consolidated statements of income (loss) and reinvested earnings and cash flow for each of the years in the three-year period ended December 31, 2002. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian and United States generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of NOVA Chemicals Corporation as at December 31, 2002, 2001, and 2000 and the results of its operations and its cash flow for each of the years in the three-year period ended December 31, 2002 in accordance with Canadian generally accepted accounting principles.



Ernst & Young LLP  
*Chartered Accountants*

March 4, 2003  
Calgary, Canada



## CONSOLIDATED STATEMENTS OF INCOME (LOSS) AND REINVESTED EARNINGS

YEAR ENDED DECEMBER 31 (MILLIONS OF U.S. DOLLARS, EXCEPT PER SHARE AMOUNTS)			
	2002	2001	2000
<b>REVENUE</b>	<b>\$3,091</b>	<b>\$3,194</b>	<b>\$3,916</b>
Feedstock and operating costs	2,661	2,901	2,960
Depreciation and amortization	266	230	188
Selling, general and administrative	176	191	197
Research and development	39	40	39
Restructuring charges (Note 16)	20	27	118
	<b>3,162</b>	<b>3,389</b>	<b>3,502</b>
Operating income (loss)	(71)	(195)	414
Interest expense (net) (Notes 4 and 9)	(87)	(88)	(45)
Equity in earnings of affiliates (Note 6)	5	14	32
Other gains (Note 17)	59	58	32
	(23)	(16)	19
Income (loss) before income taxes	(94)	(211)	433
Income tax recovery (expense) (Note 18)	13	83	(131)
<b>NET INCOME (LOSS)</b>	<b>\$ (81)</b>	<b>\$ (128)</b>	<b>\$ 302</b>
Reinvested earnings, beginning of year	740	924	814
Repurchased shares (Note 13)	—	—	(109)
Change in accounting policy (Note 2)	—	—	(24)
Common share dividends	(23)	(23)	(23)
Preferred securities dividends and distributions	(31)	(33)	(36)
Reinvested earnings, end of year	<b>\$ 605</b>	<b>\$ 740</b>	<b>\$ 924</b>
Weighted-average number of common shares outstanding (millions)	86	85	89
Earnings (loss) per common share (Note 13)			
— Basic	<b>\$ (1.30)</b>	<b>\$ (1.88)</b>	<b>\$ 3.00</b>
— Diluted	<b>\$ (1.30)</b>	<b>\$ (1.88)</b>	<b>\$ 2.84</b>

See accompanying Notes to Consolidated Financial Statements.

## CONSOLIDATED BALANCE SHEETS

DECEMBER 31 (MILLIONS OF U.S. DOLLARS)	2002	2001	2000
<b>ASSETS</b>			
Current assets			
Cash and cash equivalents	\$ 14	\$ 10	\$ 27
Accounts receivable (Note 4)	249	362	451
Inventories (Note 5)	321	279	533
	584	651	1,011
Investments and other assets (Note 6)	537	549	447
Plant, property and equipment, net (Note 7)	3,033	3,159	3,296
	<b>\$4,154</b>	<b>\$4,359</b>	<b>\$4,754</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>			
Current liabilities			
Bank loans	\$ 3	\$ 14	\$ 28
Accounts payable and accrued liabilities (Note 8)	562	437	617
Long-term debt installments due within one year (Note 9)	1	186	17
	566	637	662
Long-term debt (Note 9)	1,211	1,322	1,406
Deferred credits (Note 10)	816	786	760
	<b>2,593</b>	<b>2,745</b>	<b>2,828</b>
Contingencies and commitments (Notes 9, 11, 21 and 23)			
<b>SHAREHOLDERS' EQUITY</b>			
Preferred securities (Note 11)	383	383	383
Retractable preferred shares (Note 12)	198	198	198
Common shares (Note 13)	484	472	460
Cumulative translation adjustment	(109)	(179)	(39)
Reinvested earnings	605	740	924
	<b>1,561</b>	<b>1,614</b>	<b>1,926</b>
	<b>\$4,154</b>	<b>\$4,359</b>	<b>\$4,754</b>

See accompanying Notes to Consolidated Financial Statements.



Kerry L. Hawkins, Director



Jeffrey M. Lipton, Director

## CONSOLIDATED STATEMENTS OF CASH FLOW

YEAR ENDED DECEMBER 31 (MILLIONS OF U.S. DOLLARS)	2002	2001	2000
<b>OPERATING ACTIVITIES</b>			
Net income (loss)	<b>\$ (81)</b>	\$(128)	\$ 302
Depreciation and amortization	<b>266</b>	230	188
Future income taxes (recovery) (Note 18)	<b>8</b>	(4)	93
Other (gains) losses (net of current tax)	<b>(39)</b>	—	60
Equity in earnings of affiliates	<b>(5)</b>	(14)	(32)
Methanex dividends received	<b>4</b>	—	—
Asset write-downs	<b>—</b>	10	—
Funds from operations	<b>153</b>	94	611
Changes in non-cash working capital (Note 19)	<b>206</b>	184	(260)
Cash from operations	<b>359</b>	278	351
<b>INVESTING ACTIVITIES</b>			
Proceeds on sales of assets and investments	<b>82</b>	—	741
Shell acquisition (Note 3)	<b>—</b>	—	(212)
Plant, property and equipment additions	<b>(71)</b>	(168)	(440)
Turnaround costs, long-term investments and other assets	<b>(18)</b>	(156)	(8)
Changes in non-cash working capital (Note 19)	<b>—</b>	(16)	(186)
	<b>(7)</b>	(340)	(105)
<b>FINANCING ACTIVITIES</b>			
Increase (decrease) in current bank loans	<b>(11)</b>	(14)	28
Proceeds on liquidation of swap positions	<b>13</b>	27	—
Long-term debt additions	<b>—</b>	302	170
Long-term debt repayments	<b>(2)</b>	(61)	(385)
Increase (decrease) in revolving debt	<b>(294)</b>	(159)	115
Preferred securities dividends and distributions	<b>(31)</b>	(33)	(36)
Common shares issued	<b>11</b>	12	4
Common shares repurchased	<b>—</b>	—	(150)
Common share dividends	<b>(23)</b>	(23)	(23)
Changes in non-cash working capital (Note 19)	<b>(11)</b>	(6)	(1)
	<b>(348)</b>	45	(278)
Increase (decrease) in cash and cash equivalents	<b>4</b>	(17)	(32)
Cash and cash equivalents, beginning of year	<b>10</b>	27	59
Cash and cash equivalents, end of year	<b>\$ 14</b>	\$ 10	\$ 27

See accompanying Notes to Consolidated Financial Statements.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(amounts in U.S. dollars, unless otherwise noted)

## 1. BASIS OF PRESENTATION

NOVA Chemicals is incorporated under the laws of Alberta, Canada. Where used in these financial statements, “NOVA Chemicals” or “the Corporation” means NOVA Chemicals Corporation alone or together with its subsidiaries and affiliates, depending on the context in which such terms are used. The consolidated financial statements include the accounts of the Corporation, its subsidiaries and the proportionate share of the accounts of its joint ventures.

These consolidated financial statements have been prepared by management on the historical cost basis in accordance with Canadian Generally Accepted Accounting Principles (GAAP). These accounting principles are different in some respects from those generally accepted in the United States and the significant differences are described in Note 24, “United States Generally Accepted Accounting Principles.”

The Corporation measures and reports its consolidated financial statements in U.S. dollars.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### *Changes in Accounting Policies*

On January 1, 2002, NOVA Chemicals adopted the following new accounting standards as prescribed by the Canadian Institute of Chartered Accountants (CICA), which had no significant effect on the Corporation’s financial position or results of operations.

**Stock-based Compensation and Other Stock-based Payments** ~ The new recommendations encourage, but do not require, the use of a fair-value based method to account for stock-based awards granted to employees. The Corporation has chosen not to apply the fair-value method of accounting and continues to utilize the intrinsic-value method of accounting for stock options where compensation expense, if any, is measured based on the excess of the market price of the stock over the option’s exercise price on the date of grant. As options are generally granted at the market price on the date of grant, no compensation cost results. When the fair-value based method is not used, pro forma disclosures must be provided as if compensation cost had been measured using the fair-value method. These disclosures are provided in Note 14.

Under NOVA Chemicals’ equity appreciation plan, units are redeemable for cash. Accordingly, compensation cost is measured as the excess of the quoted market value of the Corporation’s common shares over the redemption price of the units and recognized in income based on vesting provisions.



**Foreign Currency Translation** ~ The new recommendations regarding accounting for foreign currency translation eliminated the deferral and amortization of unrealized translation gains and losses on foreign denominated monetary items with a fixed life. NOVA Chemicals' foreign denominated monetary items with a fixed life are primarily Canadian denominated debt. As the debt is designated as a partial hedge of the Corporation's Canadian assets, the resulting unrealized foreign exchange gains or losses are deferred in a separate component of shareholders' equity entitled "cumulative translation adjustment."

**Goodwill and Other Intangible Assets** ~ The new recommendations regarding accounting for goodwill and other intangible assets require that new and existing goodwill and indefinite life intangible assets be tested annually for impairment, and not be subject to amortization. Intangible assets with a finite useful life are subject to amortization over their useful life. NOVA Chemicals' prior business combinations have not resulted in any goodwill being recorded and the Corporation's intangible assets are primarily comprised of patents with finite useful lives.

#### *Cost of Service*

Under the terms of certain sales agreements, the Corporation sells ethylene on a take-or-pay basis, for a price determined by a cost-of-service formula that includes the cost of fuel and feedstock, operating expenses, depreciation, income taxes, return on capital and realized foreign exchange gains or losses in respect of debt service. The return on capital includes a 20% after-tax return on equity based on a deemed debt to equity ratio.

#### *Cash and Cash Equivalents*

Short-term investments extending not greater than 30 days are considered to be cash equivalents, and are recorded at cost, which approximates current market value.

#### *Foreign Currency Translation*

The Corporation's foreign operations are considered self-sustaining and are translated into U.S. dollars using the current rate method. Resulting translation gains or losses are deferred in the cumulative translation adjustment account until there is a realized reduction of the investment in the foreign operations.

NOVA Chemicals' foreign denominated monetary items, principally Canadian denominated debt, are translated at the current rate of exchange and the resulting unrealized foreign exchange gains or losses are deferred in the cumulative translation adjustment account as the Canadian dollar debt is designated as a partial hedge of the Corporation's Canadian assets.

#### *Hedging Activities*

The Corporation sells petrochemical products at prices denominated in various currencies, purchases energy commodities, invests in foreign operations and issues short and long-term debt, including amounts in foreign currencies. These activities result in exposures to fluctuations in foreign currency exchange rates, commodity prices and interest rates. NOVA Chemicals manages these exposures by entering into contractual arrangements (derivatives), which reduce (hedge) the exposure by creating offsetting positions. Derivative instruments are used only for hedging purposes and are linked to specific assets and liabilities on the balance sheet or to specific firm commitments or forecasted transactions. They are not utilized for trading or speculative purposes.

NOVA Chemicals has U.S., Canadian and European-based petrochemical operations. The Corporation manages its exposure to fluctuations in these exchange rates by using forward exchange

contracts. Gains or losses realized on settlement of the forward exchange contracts are recognized in income in the same period as the related expenditures.

NOVA Chemicals uses commodity-based derivatives to manage its exposure to price fluctuations on crude oil, refined products and natural gas transactions. The instruments are used to moderate against adverse short-term price movements. Occasionally, longer-term positions will be taken to manage price risk for anticipated supply requirements. Gains or losses realized on the settlement of commodity-based instruments are recognized in income in the same period as the related revenues or expenditures.

NOVA Chemicals periodically enters into interest rate swaps in order to manage the fixed and floating interest rate mix on its long-term debt portfolio. The interest rate swap agreements generally involve the periodic exchange of payments without the exchange of the notional principal amounts upon which the payments are based. The amounts paid or received are recorded as an adjustment to interest expense on the hedged debt instrument.

Gains or losses on termination or liquidation of derivative instruments are deferred as current or non-current assets or liabilities on the balance sheet, as appropriate, and are amortized to income in the period in which the underlying hedged transaction is recognized.

#### *Inventories*

Inventories are carried at the lower of cost and net realizable value. Cost is determined on a first-in, first-out basis with no allocation of fixed production overhead.

#### *Investments*

Investments in affiliates, over which the Corporation exercises significant influence, but not control, are accounted for by the equity method. Under this method, the investment is carried at cost plus the related share of undistributed earnings, less dividends received. Other investments, except investments in joint ventures, are carried at cost.

#### *Joint Ventures*

NOVA Chemicals applies the proportionate consolidation method of accounting for its investments in joint venture operations. Under the proportionate consolidation method, NOVA Chemicals records, on a line-by-line basis within its financial statements and notes, its pro rata share of the joint venture's assets, liabilities, revenues, expenses and cash flows.

#### *Plant, Property and Equipment (PP&E)*

NOVA Chemicals' PP&E consists primarily of manufacturing equipment, land and buildings for producing petrochemicals. PP&E are valued at historical cost. Financing costs incurred during major construction are capitalized as part of the cost of the asset until the asset is available for use. Costs related to turnaround activities are capitalized and amortized over the period remaining to the next turnaround activity, while maintenance and repair costs are expensed as incurred.

The Corporation periodically reviews the carrying value of PP&E for impairment when circumstances indicate an asset's value may not be recoverable. If it is determined that an asset's undiscounted cash flows are less than its carrying value, the asset is written down to its net realizable value.

Future removal and site restoration costs are provided for on a straight-line basis over the expected remaining economic lives of the assets.

*Depreciation*

Plant and equipment are depreciated on a straight-line basis at annual rates ranging from 3% to 40%. These rates are designed to write the assets off over their estimated useful lives. The Alberta ethylene plants and the hydrogen plant are depreciated over the lives of the related sales agreements.

*Deferred Start-Up Costs*

Costs associated with start-up activities on constructed plants are deferred from the date of mechanical completion of the facilities until the date of commercial service. Any revenues earned during this period are recorded as a reduction in deferred start-up costs. These costs are amortized over a five-year period, commencing on the date of commercial service.

*Income Taxes*

Cost-of-service activities operate under billing structures that allow NOVA Chemicals to recover related income tax costs from customers based on the taxes payable method. NOVA Chemicals records income tax expense on these operations equal to recoverable amounts.

For non-cost-of-service operations, effective January 1, 2000, the liability method of tax allocation accounting is used. Under the liability method, future tax assets and liabilities are determined based on differences between the accounting and tax basis of assets and liabilities and measured using the substantively enacted tax rates and laws that will be in effect when the differences are expected to reverse.

Under the liability method, future income taxes are also provided on the difference between the accounting and tax basis of equity investments. One of these differences results from recording equity earnings for accounting purposes. Accordingly, income tax expense is provided on equity earnings.

The effect, on January 1, 2000, of adopting the liability method was to increase the carrying value of plant, property and equipment and future income tax liabilities by \$297 million and \$353 million, respectively, and to reduce shareholders' equity by \$56 million.

*Employee Future Benefits*

On January 1, 2000, NOVA Chemicals adopted the CICA recommendations regarding accounting for employee future benefits, which required that assets be measured at fair value and liabilities be measured at market discount rates. The accounting change resulted in a \$51 million increase in a net employee future benefit asset that will be amortized as a reduction to pension and post-retirement expense over the estimated average remaining service lifetime of the employee group (EARSL).

**Pension Plans** ~ NOVA Chemicals sponsors both defined benefit and defined contribution pension arrangements covering substantially all employees.

The cost of defined benefit pensions is determined using the projected benefit method prorated on employment services and is expensed as the employees provide services. Adjustments arising from plan amendments and changes in assumptions are amortized on a straight-line basis over EARSL. Adjustments arising from experience gains and losses are amortized over EARSL when they exceed 10% of the greater of accrued obligations or plan assets. Gains or losses arising from plan curtailments and settlements are recognized in the year in which they occur. For purposes of calculating the expected return on plan assets, pension assets are revalued at fair value.

The cost of defined contribution benefits is expensed as earned by employees. NOVA Chemicals makes contributions in accordance with plan agreements.

**Post-Retirement Benefits Other Than Pensions** ~ In North America, NOVA Chemicals provides medical care and life insurance benefits to eligible retirees and their dependents. Post-retirement benefit costs are expensed as the employees provide services.

#### *Deferred Share Unit Plans*

Units issued under the Plans are calculated based on annual management incentive awards or director fees. The cost of the units earned is expensed as employees and directors provide services. Any adjustments to the value of the units as a result of expected changes in NOVA Chemicals' common stock value are amortized on a straight-line basis over the estimated average remaining service lifetime of individuals participating in the Plans.

#### *Earnings Per Share*

The treasury stock method, adopted on January 1, 2001, is used to calculate diluted earnings per share. Under this method, the incremental number of common shares outstanding for the diluted earnings per share calculation is determined assuming that the proceeds from exercise of dilutive options are used to repurchase common shares at the average market price during the period.

#### *Securitizations*

Securitization transactions are recorded as sales of assets based on the transfer of control to the purchaser. Transactions recorded in this manner result in the removal of the sold assets from the Corporation's balance sheet. Costs associated with securitization transactions, net of servicing fees, are reflected with interest expense.

#### *Revenue Recognition*

The Corporation recognizes revenue when the earnings process is complete. This generally occurs when products are shipped to the customer in accordance with the terms of the sales agreement, title and risk of loss have been transferred, and pricing is fixed or determinable. The Corporation accounts for sales incentives as a reduction in revenue at the time revenue is recorded.

#### *Research and Development*

Costs associated with research and development activities are expensed as incurred.

#### *Measurement Uncertainty*

The preparation of these consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect amounts reported and disclosed in the financial statements and related notes. Actual results could differ materially from those estimates due to factors such as fluctuations in commodity prices, currency exchange rates, interest rates, changes in economic conditions and regulatory changes.

#### *Comparative Figures*

Certain comparative figures have been reclassified to conform to the current year's presentation.



### 3. ACQUISITION

On January 31, 2000, the Corporation acquired Royal Dutch/Shell's European polystyrene operations (Shell) for \$185 million plus working capital of \$27 million.

The acquisition was accounted for using the purchase method, with the purchase price and related costs allocated as follows:

(MILLIONS OF DOLLARS)	2000
Net assets acquired at assigned values	
Net current assets	\$ 27
Plant, property and equipment	210
Other assets	11
	<u>\$248</u>
Cash consideration	\$212
Transaction and integration costs	36
	<u>\$248</u>

### 4. ACCOUNTS RECEIVABLE

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Trade	\$173	\$154	\$262
Other	53	74	133
Allowance for doubtful accounts <sup>(1)</sup>	(8)	(13)	(10)
	<u>218</u>	<u>215</u>	<u>385</u>
Income taxes receivable	31	147	66
	<u>\$249</u>	<u>\$362</u>	<u>\$451</u>

<sup>(1)</sup> The Corporation's special purpose entity maintains an allowance for doubtful accounts of \$5 million at December 31, 2002 (2001 and 2000 – \$10 million) related to securitized trade receivables.

#### *Accounts Receivable Securitizations*

The Corporation sells undivided interests in certain trade accounts receivable pursuant to revolving securitization transactions in which servicing responsibilities are retained. The receivables are sold at a discount approximating the purchasers' financing cost of issuing commercial paper backed by the accounts receivable. The sale of receivables is reflected as a reduction of accounts receivable and as operating cash flows. As collections reduce previously sold interests, new accounts receivable are sold, to a maximum amount equal to the lesser of eligible receivables or \$195 million. Recourse on sold receivables is limited to the receivables and certain reserves provided to cover credit losses and dilution (such as discounts taken by customers, rebates and other non-cash reductions). The current securitization agreements expire September 23, 2003 and are renewable for a further one-year term.

Information regarding the Corporation's securitization programs is as follows:

DECEMBER 31 (MILLIONS OF DOLLARS, UNLESS OTHERWISE NOTED)	2002	2001	2000
Amount sold at end of year <sup>(1)</sup>	\$163	\$154	\$195
Loss, dilution and other reserves (as a % of eligible accounts receivable)	17%	16%	7%
Interest expense, net of servicing fees	\$ 4	\$ 7	\$ 11

<sup>(1)</sup> At December 31, 2002, \$11 million (2001 – \$24 million and 2000 – \$nil) is reflected in accrued liabilities as amounts repayable under the facility due to decreases in accounts receivable balances (see Note 8).

One of the Corporation's securitization transactions involves the use of a special purpose entity (SPE). Information regarding the cash flows between the Corporation and the SPE are as follows:

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Repayment of securitization proceeds	\$ (6)	\$ (26)	\$ —
Proceeds from collections reinvested in revolving period securitizations <sup>(1)</sup>	\$1,289	\$1,410	\$1,562
Servicing fees received	\$ 2	\$ 2	\$ 2
Other cash flows received	\$ 74	\$ 48	\$ 153

<sup>(1)</sup> Collections received by the SPE on accounts receivable previously sold are used to purchase interests in new accounts receivable.

## 5. INVENTORIES

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Materials and supplies	\$ 39	\$ 38	\$ 38
Raw materials	121	93	172
Finished goods	161	148	323
	\$321	\$279	\$533

## 6. INVESTMENTS AND OTHER ASSETS

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002		2001		2000	
	INVESTMENT	EQUITY EARNINGS	INVESTMENT	EQUITY EARNINGS	INVESTMENT	EQUITY EARNINGS
Methanex Corporation <sup>(1)(2)</sup>	\$399	\$ 5	\$397	\$14	\$400	\$32
Other investments <sup>(3)</sup>	27	—	17	—	17	—
Other assets <sup>(4)</sup>	111	—	135	—	30	—
	\$537	\$ 5	\$549	\$14	\$447	\$32

<sup>(1)</sup> Equity earnings includes a \$33 million before-tax charge (2001 – \$3 million and 2000 – \$nil) representing NOVA Chemicals' share of Methanex's restructuring charges.

<sup>(2)</sup> Dividends received of \$4 million (2001 and 2000 – \$nil) are recorded as a reduction in the Corporation's investment.

<sup>(3)</sup> Includes an investment of \$15 million in a special purpose entity with respect to the accounts receivable securitization program described in Note 4.

<sup>(4)</sup> See schedule on the following page.

### *Methanex Corporation*

In 2002, Methanex completed a normal course issuer bid for repurchase of up to 10% of its outstanding common shares. NOVA Chemicals did not tender any of its shares and as a result, the Corporation's holding in Methanex rose to 37.4% at December 31, 2002 (2001 – 35.8% and 2000 – 29.2%). The market value of NOVA Chemicals' investment in Methanex shares at December 31, 2002 was approximately \$393 million (2001 – \$260 million and 2000 – \$302 million). After deducting future income taxes of \$33 million, the book value of NOVA Chemicals' net investment in Methanex was \$366 million on December 31, 2002.

The following is summarized financial information for Methanex:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Revenue	\$1,009	\$1,149	\$1,061
Operating expenses and depreciation	\$ 850	\$1,024	\$ 866
Net income <sup>(1)</sup>	\$ 26	\$ 71	\$ 145

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Current assets	\$ 754	\$ 576	\$ 664
Plant, property, and equipment and other assets	1,065	1,117	1,140
Current liabilities	(142)	(265)	(137)
Long-term liabilities	(773)	(493)	(622)
Shareholders' equity	\$ 904	\$ 935	\$1,045

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Cash inflows (outflows) from:			
Operating activities	\$ 190	\$ 376	\$ 216
Financing activities	\$ 70	\$ (188)	\$ (78)
Investing activities	\$ (171)	\$ (83)	\$ (63)

<sup>(1)</sup> 2002 includes an \$86 million asset restructuring charge (2001 – \$11 million and 2000 – \$nil).

#### *Purchase Price Excess*

The cost of the Corporation's investment in Methanex exceeded its share of the underlying net book value at acquisition date. Purchase price excess is recorded as part of the cost of the investment and is amortized over twenty years. Amortization expense was \$5 million in 2002 (2001 – \$6 million and 2000 – \$8 million). At December 31, 2002, the unamortized purchase price excess was \$58 million after consideration of Methanex's share buy-back programs (2001 – \$64 million and 2000 – \$81 million).

#### *Other Assets*

Other assets are comprised of the following:

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Restricted cash on retractable preferred shares (Note 12)	\$ 45	\$ 78	\$—
Deferred debt issue costs <sup>(1)</sup>	17	16	8
Deferred start-up costs <sup>(2)</sup>	14	18	—
Other	35	23	22
	\$111	\$135	\$30

<sup>(1)</sup> Debt issue costs are amortized on a straight-line basis over the terms of the related debt instruments.

<sup>(2)</sup> Start-up costs consist of the unamortized portion of operating costs, net of incidental revenues, incurred during the pre-operating period on constructed assets, which were deferred until commercial production levels were achieved in 2001.

### *Petrochemical Joint Ventures*

NOVA Chemicals owns a 50% interest in an ethylene plant and a 20% interest in a cogeneration facility located at Joffre, Alberta. In addition, the Corporation has a 50% interest in the Fort Saskatchewan Ethylene Storage Limited Partnership and a 33.3% interest in an ethane gathering system in Alberta.

The following is summarized financial information for NOVA Chemicals' interests in these joint ventures, which the Corporation reports on a line-by-line basis in its accounts:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Revenue	\$ 171	\$ 144	\$ 61
Operating expenses, depreciation and income taxes	(161)	(138)	(48)
Net income	\$ 10	\$ 6	\$ 13

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Current assets	\$ 21	\$ 20	\$ 31
Plant, property and equipment and other assets	489	514	562
Current liabilities	(22)	(25)	(37)
Long-term liabilities	(28)	(28)	(24)
Venturers' equity	\$ 460	\$ 481	\$ 532

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Cash inflows (outflows) from:			
Operating activities	\$ 34	\$ 31	\$ 19
Financing activities	\$ (1)	\$ 2	\$ 2
Investing activities	\$ (8)	\$ (14)	\$ (91)

NOVA Chemicals also owned a 20% interest in the Cochin Pipeline, which was sold in January 2002 for cash proceeds of \$64 million, resulting in an after-tax gain of \$36 million.

## **7. PLANT, PROPERTY AND EQUIPMENT**

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Plant and equipment	\$ 4,847	\$ 4,818	\$ 4,218
Land	32	33	31
Under construction	55	85	702
	4,934	4,936	4,951
Accumulated depreciation	(1,901)	(1,777)	(1,655)
Net book value	\$ 3,033	\$ 3,159	\$ 3,296

During 2002, the Corporation sold and leased back certain buildings for total proceeds of \$13 million, resulting in an after-tax gain of \$3 million. The gain realized on the sale has been deferred and is being amortized to income over the term of the lease, which is 18 years.



## 8. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Accounts payable			
Trade	\$350	\$241	\$351
Other	25	20	31
	375	261	382
Accrued liabilities			
Interest	22	21	23
Accounts receivable securitization programs <sup>(1)</sup>	11	24	—
Deferred credit on hedges of former economic exposures <sup>(2)</sup>	3	16	37
Site clean-up and restoration	3	3	4
Dividends	6	7	13
Deferred hedging gains <sup>(3)</sup>	8	—	—
Other	134	105	158
	187	176	235
	\$562	\$437	\$617

<sup>(1)</sup> Represents amounts repayable pursuant to the Corporation's accounts receivable securitization programs (see Note 4).

<sup>(2)</sup> Represents the portion of deferred credit on hedges of former economic exposures maturing within one year (see Notes 10 and 23).

<sup>(3)</sup> Represents the portion of deferred gains realized on liquidation of natural gas option positions to be recognized within one year (see Notes 10 and 23).

## 9. LONG-TERM DEBT

DECEMBER 31 (MILLIONS OF DOLLARS,  
UNLESS OTHERWISE NOTED)

		2002		2001		2000	
			AVERAGE YEAR-END INTEREST RATE <sup>(1)</sup>		AVERAGE YEAR-END INTEREST RATE <sup>(1)</sup>		AVERAGE YEAR-END INTEREST RATE
	MATURITY	DEBT		DEBT		DEBT	
Unsecured debentures and notes	2005 to 2028	\$ 633	7.3%	\$ 632	7.3%	\$ 642	7.4%
Unsecured loans	2004	—	—	295	2.9%	454	6.1%
Medium-term notes	2006 to 2009	550	6.0%	550	3.7%	250	7.4%
Other unsecured debt	2004 to 2020	29	6.2%	31	6.3%	77	7.5%
		1,212		1,508		1,423	
Less installments due within one year		(1)		(186)		(17)	
		\$1,211		\$1,322		\$1,406	

<sup>(1)</sup> Average year-end interest rates include the effects of interest rate swaps (see Note 23).

### Unsecured Debentures and Notes

These debentures and notes are unsecured borrowings which rank *pari passu* in all respects with other unsecured and unsubordinated debt of the Corporation. Terms of the outstanding unsecured debentures and notes are as follows:

DECEMBER 31 (MILLIONS OF DOLLARS, UNLESS OTHERWISE NOTED)		2002	2001	2000
MATURITY	STATED INTEREST RATE	DEBT	DEBT	DEBT
2005 <sup>(1)</sup>	7.0%	<b>\$100</b>	\$100	\$100
2010 <sup>(2)</sup>	7.85%	<b>158</b>	157	167
2025 <sup>(3)</sup>	7.875%	<b>100</b>	100	100
2026 <sup>(4)</sup>	7.0%	<b>150</b>	150	150
2028 <sup>(5)</sup>	7.25%	<b>125</b>	125	125
		<b>\$633</b>	\$632	\$642

<sup>(1)</sup> Not callable by the Corporation or redeemable by the holders prior to maturity.

<sup>(2)</sup> \$250 million Canadian; callable at the option of the Corporation at any time.

<sup>(3)</sup> Callable at the option of the Corporation on or after September 15, 2005.

<sup>(4)</sup> Redeemable at the option of the holders on August 15, 2003.

<sup>(5)</sup> Redeemable at the option of the holders on August 15, 2008.

### Unsecured Loans

The Corporation has a committed credit facility<sup>1</sup> from a syndicate of Canadian and U.S. banks. The facility provides for a floating rate revolving line of credit and the issuance of letters of credit, to a maximum of \$310 million. The facility expires in April 2004 and is renewable, in April 2003, for a further 364-day period extending to April 2005. If not renewed in April 2003, the credit facility expires in April 2004. Obligations under the credit facility rank *pari passu* with all other unsecured and unsubordinated debt of the Corporation.

At December 31, 2002 NOVA Chemicals was in compliance with all required financial covenants under the credit facility.

### Medium-Term Notes

The notes are unsecured borrowings ranking *pari passu* with all other unsecured and unsubordinated debt of the Corporation. The \$300 million 7% notes are due in May 2006 and are not callable by the Corporation or redeemable by the holders prior to maturity. The \$250 million 7.4% notes are due in April 2009 and are callable by the Corporation at any time.

### Repayment Requirements

Repayment requirements in respect of long-term debt are as follows:

(MILLIONS OF DOLLARS)		
2003		\$ 1
2004		—
2005		102
2006		302
2007		2
Thereafter		805
		<b>\$1,212</b>

### Interest Expense

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Interest on long-term debt	<b>\$ 80</b>	\$ 96	\$ 98
Interest on bank loans and securitizations	<b>5</b>	8	10
Other	<b>5</b>	4	2
Gross interest expense	<b>90</b>	108	110
Interest capitalized during plant construction	<b>—</b>	(18)	(59)
Interest income	<b>(3)</b>	(2)	(6)
Interest expense (net)	<b>\$ 87</b>	\$ 88	\$ 45

## 10. DEFERRED CREDITS

DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Future income taxes (Notes 2 and 18)	\$611	\$615	\$601
Pension and post-retirement benefit obligations	92	83	68
Deferred hedging gains <sup>(1)</sup>	40	24	—
Site clean-up and restoration	27	26	31
Deferred share unit plan obligations	16	13	8
Deferred credit on hedges of former economic exposures <sup>(2)</sup>	—	3	20
Other	30	22	32
	\$816	\$786	\$760

<sup>(1)</sup> Represents the long-term portion of deferred gains realized on liquidation of natural gas option positions (2002 – \$9 million; 2001 and 2000 – \$nil) and fixed for floating interest rate swaps (2002 – \$31 million; 2001 \$24 – million and 2000 – \$nil) (see Notes 8 and 23).

<sup>(2)</sup> Represents the long-term portion of deferred credit on hedges of former economic exposures (see Notes 8 and 23).

## 11. PREFERRED SECURITIES

On January 26, 1999 and October 22, 1998, NOVA Chemicals issued \$172.5 million and \$210 million of preferred securities due March 31, 2048 and December 31, 2047, respectively. The securities are callable by the Corporation at any time on or after January 26, 2004 and October 22, 2003, respectively.

Distributions on these securities are payable at annual rates of 9.04% and 9.50%, respectively, and are deductible for tax purposes by the Corporation. The after-tax distributions are charged to reinvested earnings. The Corporation may, subject to certain conditions, elect to defer distributions for a period of up to 20 consecutive quarters. No distributions relating to the securities have been deferred to date.

The Corporation may elect to pay the maturity amount, the redemption amount and the deferred distributions by delivering to a trustee, preferred shares, common shares or other equity securities of NOVA Chemicals. The trustee would then sell the delivered securities and pay cash to the holders of the preferred securities. The principal amount has been classified as equity as the Corporation has the unrestricted ability to settle the amount by issuing its own equity securities.

## 12. RETRACTABLE PREFERRED SHARES

In connection with the acquisition of styrenics assets from Huntsman Corporation on December 31, 1998, a subsidiary of the Corporation issued retractable preferred shares with a liquidation preference of \$198 million as partial consideration. Holders of the retractable preferred shares have the right to exchange the shares (a “retraction”) for NOVA Chemicals common shares (plus preferred shares if the market value of such common shares is less than \$198 million).

During 2001 and 2002, certain changes were made to the terms of the retractable preferred shares and related stockholder agreements giving the Corporation the right to call the retractable preferred shares on or after December 15, 2001. These changes effectively provide the Corporation with the right to repurchase the retractable preferred shares prior to any retraction into NOVA Chemicals common shares. If the Corporation does not exercise its repurchase rights prior to October 1, 2003, the market-based exchange rate at which the retractable preferred shares may be retracted into NOVA Chemicals common shares (and, accordingly, the effective price at which the common shares would be issued) will be fixed on that date. The number of NOVA Chemicals common shares issuable upon a retraction remains limited to a maximum of 8.5 million shares with the

balance of the obligation, if any, met through the issuance of NOVA Chemicals preferred shares. The dividend rate on the retractable preferred shares is 2% per year.

Coincident with making the above changes, NOVA Chemicals entered into a total return swap, which terminates on October 1, 2003, with respect to the retractable preferred shares. Under the terms of the total return swap: (i) the counterparty pays NOVA Chemicals the total return on the retractable preferred shares (dividends plus positive changes in equity value of the preferred shares, capped at \$191 million until termination or sale at which time any such positive changes are not capped) and (ii) NOVA Chemicals pays the counterparty a spread to LIBOR as well as any negative changes in the equity value of the retractable preferred shares.

NOVA Chemicals is obligated under the swap to provide margin (cash, government securities or a letter of credit) equal to 20% of the original notional amount of \$191 million, which is currently satisfied by a letter of credit. In addition, the Corporation is also obligated under the swap to provide margin equal to the difference between the original notional amount and the current notional amount of \$180 million, which will be reduced to \$126 million as of April 1, 2003. This margin is currently satisfied by posting restricted cash. If the equity value of the retractable preferred shares decreases by 5% or more at anytime, the Corporation is required to post additional margin. If the equity value of the retractable preferred shares increases by 5% or more, any excess collateral will be returned to NOVA Chemicals. Changes in equity value of the retractable preferred shares during the term of the swap will be determined based on changes in the average price of the outstanding 9.04% and 9.50% preferred securities issued by NOVA Chemicals (see Note 11).

If NOVA Chemicals defaults on other debt with an aggregate principal amount of \$25 million or more, or the closing price of the Corporation's common shares is U.S. \$15.00 or less, or upon certain other credit events, the counterparty will have the right to sell the retractable preferred shares to a third party and terminate the swap. NOVA Chemicals would then owe the counterparty the difference between the actual sale price received by the counterparty and the most recent adjusted notional equity value of the retractable preferred shares (in the event the difference was negative). Subsequent to the termination of the swap, NOVA Chemicals may, at its option, repurchase the retractable preferred shares for \$198 million plus accrued and unpaid dividends.

77

## 13. COMMON SHARES

### *Authorized*

Unlimited number of voting common shares without par value.

### *Issued and Outstanding*

(MILLIONS OF DOLLARS, EXCEPT NUMBER OF SHARES)	2002		2001		2000	
Beginning of year	<b>85,778,788</b>	<b>\$472</b>	84,884,333	\$460	92,543,746	\$497
Repurchased shares <sup>(1)</sup>	—	—	—	—	(8,000,000)	(41)
Issued for cash on exercise of stock options	<b>749,024</b>	<b>12</b>	894,455	12	340,587	4
End of year <sup>(2)</sup>	<b>86,527,812</b>	<b>\$484</b>	85,778,788	\$472	84,884,333	\$460

<sup>(1)</sup> NOVA Chemicals repurchased 8 million of its common shares on the Toronto Stock Exchange for \$150 million in 2000.

<sup>(2)</sup> Stated common share capital for legal purposes at December 31, 2002 is \$1,656 million.



*Shares Reserved for Future Issue*

DECEMBER 31 (NUMBER OF SHARES)	2002	2001	2000
Under the employee incentive stock option plan <sup>(1)(2)</sup>	<b>11,244,963</b>	11,993,987	12,888,442
Under the director compensation plan	<b>47,800</b>	47,800	47,800
Under the terms of the retractable preferred share agreement (Note 12)	<b>8,500,000</b>	8,500,000	8,500,000
	<b>19,792,763</b>	20,541,787	21,436,242

<sup>(1)</sup> Under the employee incentive stock option plan, options are outstanding to officers and employees to purchase 8,625,532 shares at prices ranging from \$14.247 to \$36.00 (Canadian \$) per share with expiration dates between February 25, 2003, and March 6, 2012. A total of 2,619,431 common shares are reserved but unallocated. See Note 14 for further details regarding the plan.

<sup>(2)</sup> On May 15, 2000, shareholders approved an increase in the number of common shares reserved for issuance under the employee incentive stock option plan, to 13 million common shares.

*Earnings Per Share*

The following table outlines the calculation of basic and diluted earnings (loss) per share:

YEAR ENDED DECEMBER 31	2002		2001		2000	
	BASIC	DILUTED	BASIC	DILUTED	BASIC	DILUTED
Net income (loss)	\$ (81)	\$ (81)	\$ (128)	\$ (128)	\$ 302	\$ 302
Preferred securities dividends and distributions	(31)	(31)	(33)	(33)	(36)	(36)
Net income (loss) available to common shareholders—basic	\$ (112)	\$ (112)	\$ (161)	\$ (161)	\$ 266	\$ 266
Add back preferred share dividends	—	—	—	—	—	14
Net income (loss) available to common shareholders—diluted	—	\$ (112)	—	\$ (161)	—	\$ 280
Weighted-average common shares outstanding	86.3	86.3	85.4	85.4	88.7	88.7
Add dilutive effects <sup>(1)</sup>						
Stock options	—	—	—	—	—	1.2
Convertible preferred shares	—	—	—	—	—	8.5
Weighted-average common shares for earnings per share calculation	86.3	86.3	85.4	85.4	88.7	98.4
Earnings (loss) per common share	\$ (1.30)	\$ (1.30)	\$ (1.88)	\$ (1.88)	\$ 3.00	\$ 2.84

<sup>(1)</sup> Convertible preferred shares and stock options representing 17 million common shares have been excluded from the computation of diluted earnings per share for the year ended December 31, 2002 (2001 — 16 million) as their impact would be anti-dilutive.

*Shareholder Rights Plan*

In May 1999, NOVA Chemicals' shareholders approved a shareholder rights plan where one right was issued for each outstanding common share. The rights remain attached to the shares and are not exercisable until the commencement or announcement of a takeover bid for NOVA Chemicals' common shares or until a person acquires 20% or more of NOVA Chemicals' common shares. The plan expires in May 2009, but is subject to shareholder re-confirmation at the sixth annual meeting following the date of approval.

## 14. STOCK-BASED COMPENSATION

### *Employee Incentive Stock Option Plan*

The Corporation may grant options to its employees for up to 13 million common shares. The exercise price of each option equals the closing market price on the Toronto Stock Exchange of the Corporation's common stock on the date of grant. Options may be exercised over a 10-year period and generally 25% of the options vest at the grant date with further vesting of 25% in each of the next three years.

A summary of the status of the Corporation's employee incentive stock option plan as of December 31, 2002, 2001 and 2000, and changes during the years ended on those dates is presented below:

	2002		2001		2000	
	OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE (CANADIAN \$)	OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE (CANADIAN \$)	OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE (CANADIAN \$)
Outstanding at beginning of year	8,558,109	\$25.648	8,003,725	\$24.762	6,833,957	\$24.152
Granted	855,900	\$34.319	1,547,350	\$28.182	1,612,900	\$26.762
Exercised	(749,024)	\$23.613	(894,455)	\$21.813	(340,587)	\$21.182
Cancelled	(39,453)	\$30.713	(98,511)	\$28.267	(102,545)	\$27.490
Outstanding at end of year	8,625,532	\$26.662	8,558,109	\$25.648	8,003,725	\$24.762
Exercisable at end of year	6,116,910	\$25.159	5,404,057	\$24.193	5,022,804	\$23.125

The following table summarizes information about employee incentive stock options outstanding at December 31, 2002:

RANGE OF EXERCISE PRICES (CANADIAN \$)	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
	NUMBER OUTSTANDING	WEIGHTED-AVERAGE REMAINING CONTRACTUAL LIFE (YEARS)	WEIGHTED-AVERAGE EXERCISE PRICE (CANADIAN \$)	NUMBER EXERCISABLE	WEIGHTED-AVERAGE EXERCISE PRICE (CANADIAN \$)
\$14.247 – \$18.376	504,709	1.5	\$16.811	504,709	\$16.811
\$20.234 – \$21.225	997,400	3.5	\$20.749	997,400	\$20.749
\$24.950 – \$26.346	3,520,293	6.3	\$25.732	3,187,905	\$25.682
\$28.050 – \$36.000	3,603,130	7.5	\$30.587	1,426,896	\$30.027
	8,625,532			6,116,910	

The Corporation uses the intrinsic-value method of accounting for stock-based compensation awards granted to employees, where compensation expense, if any, is measured based on the excess of the market price of the stock over the option exercise price on the date of grant. As options are generally granted at the market price on the date of grant, no compensation cost results. Had compensation cost for stock options been determined and expensed based on the fair-value method, the pro forma amounts, on the following page, would have resulted:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS, EXCEPT PER SHARE AMOUNTS)	2002	2001	2000
Net income (loss)			
As reported	\$ (81)	\$(128)	\$302
Pro forma	\$ (92)	\$(134)	\$293
Earnings (loss) per share—basic			
As reported	\$(1.30)	\$(1.88)	\$3.00
Pro forma	\$(1.43)	\$(1.95)	\$2.90
Earnings (loss) per share—diluted			
As reported	\$(1.30)	\$(1.88)	\$2.84
Pro forma	\$(1.43)	\$(1.95)	\$2.78

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions used for stock options granted in 2002, 2001, and 2000:

WEIGHTED-AVERAGE ASSUMPTIONS		2002	2001	2000
Expected dividend yield	%	1.0	1.0	1.0
Expected volatility	%	39.1	39.6	42.5
Risk-free interest rate	%	3.38	5.65	5.58
Expected life	years	2½	2½	2½
Fair value of options granted during the year	U.S.	\$5.57	\$5.16	\$5.36

#### *Equity Appreciation Plan*

The Corporation has an equity appreciation plan in which units are granted to key employees. The redemption price of a unit is determined by the closing price of the Corporation's common shares on the date of grant. Units may be redeemed for cash over a 10-year period and generally 25% of the units vest at the grant date with further vesting of 25% in each of the next three years. The value of a unit on the redemption date is the difference between the price of the Corporation's common shares on that date and the redemption price.

At December 31, 2002, the mark-to-market value of the vested units was approximately \$1 million (2001 – \$1 million and 2000 – \$nil).

## 15. DEFERRED SHARE UNIT PLANS

Under the Corporation's Deferred Share Unit Plans (DSUP), key employees and non-employee directors may elect on an annual basis, prior to the relevant performance period, to receive all or a portion of their management incentive award or fees, respectively, in deferred share units (DSUs).

The amount of the management incentive award that a key employee elects to have participate in the DSUP will be converted to an equivalent number of DSUs based on the average closing price of NOVA Chemicals' common shares for the last five consecutive trading days of the month of December prior to the performance period.

The amount of fees that a non-employee director elects to have participate in the DSUP will be converted to an equivalent number of DSUs based on the average closing price of NOVA Chemicals' common shares for the last five consecutive trading days preceding the end of each fiscal quarter in which the fees are earned.

The units are exercisable upon retirement or termination from the Corporation. A summary of the status of the Corporation's deferred share unit plans as of December 31, 2002, 2001 and 2000, and changes during the years ended on those dates is presented below:

EMPLOYEE DEFERRED SHARE UNITS	2002		2001		2000	
	UNITS	WEIGHTED-AVERAGE PURCHASE PRICE (U.S. \$)	UNITS	WEIGHTED-AVERAGE PURCHASE PRICE (U.S. \$)	UNITS	WEIGHTED-AVERAGE PURCHASE PRICE (U.S. \$)
Cumulative amount at beginning of year	352,393	\$16.52	280,454	\$15.88	156,446	\$13.14
Earned	65,622	\$19.14	91,063	\$18.48	124,008	\$19.35
Redeemed	(38,901)	\$16.53	(19,124)	\$16.52	—	—
Cumulative amount at end of year	379,114	\$16.97	352,393	\$16.52	280,454	\$15.88

NON-EMPLOYEE DIRECTOR DEFERRED SHARE UNITS	2002		2001		2000	
	UNITS	WEIGHTED-AVERAGE PURCHASE PRICE (CANADIAN \$)	UNITS	WEIGHTED-AVERAGE PURCHASE PRICE (CANADIAN \$)	UNITS	WEIGHTED-AVERAGE PURCHASE PRICE (CANADIAN \$)
Cumulative amount at beginning of year	44,040	\$28.91	27,806	\$29.24	15,539	\$30.13
Earned	13,343	\$33.16	16,234	\$28.34	23,288	\$28.45
Redeemed	—	—	—	—	(11,021)	\$28.83
Cumulative amount at end of year	57,383	\$29.90	44,040	\$28.91	27,806	\$29.24

The amount expensed in aggregate in 2002 related to the award of units was approximately \$4 million (2001 – \$5 million and 2000 – \$4 million).

## 16. RESTRUCTURING CHARGES

During 2002, NOVA Chemicals took several actions to streamline its operations and reduce costs. Several high-cost reactors were shut down or temporarily idled, certain capital projects were cancelled, and staff reduction and relocation programs were initiated. As a result of these activities, NOVA Chemicals recognized \$20 million in restructuring costs. The Corporation expects these restructuring actions to be substantially complete by the end of 2003.

Restructuring charges in 2001 and 2000 related to organizational changes involving plant closures, write-downs of certain non-productive assets and severance activities. All actions related to these restructuring activities have been substantially completed.

At December 31, 2002, \$27 million related to restructuring activities is included in other accrued liabilities (see Note 8).

## 17. OTHER GAINS

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002		2001		2000	
	BEFORE-TAX	AFTER-TAX	BEFORE-TAX	AFTER-TAX	BEFORE-TAX	AFTER-TAX
Gain on sale of 20% interest in Cochin Pipeline	\$59	\$36	\$—	\$—	\$—	\$—
IRS settlement	—	—	58	44	—	—
Gain on sale of investment in Dynegy Inc.	—	—	—	—	32	21
	\$59	\$36	\$58	\$44	\$32	\$21



## 18. INCOME TAXES

Income tax (recovery) expense varies from amounts computed by applying the Canadian federal and provincial statutory income tax rates to income (loss) before income taxes, as shown below:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Income (loss) before income taxes	\$ (94)	\$ (211)	\$ 433
Statutory income tax rate	39.24%	42.12%	44.62%
Computed income tax (recovery) expense	\$ (37)	\$ (89)	\$ 193
Increase (decrease) in taxes resulting from:			
Manufacturing and processing deduction	3	4	(29)
Lower effective foreign tax rates	8	25	(4)
Lower effective tax rate on equity in earnings of affiliates	(2)	(3)	(5)
Non-provision of future income taxes on cost-of-service operations <sup>(1)</sup>	8	8	9
Lower tax rate on gain related to tax settlement <sup>(2)</sup>	—	(10)	—
Income tax rate adjustments <sup>(3)</sup>	—	(17)	(29)
Other	7	(1)	(4)
Income tax (recovery) expense	\$ (13)	\$ (83)	\$ 131
Current income tax (recovery) expense	\$ (21)	\$ (79)	\$ 38
Future income tax (recovery) expense	8	(4)	93
Income tax (recovery) expense	\$ (13)	\$ (83)	\$ 131

<sup>(1)</sup> Certain agreements for cost-of-service operations provide for the recovery of income taxes from customers. The Corporation records income tax expense on these operations equal to the amounts recoverable under the agreements, resulting in no effect on net income. Some agreements limit the recoverable amount to current taxes payable. Accordingly, the provision for income taxes excludes future income tax recoveries relating to these operations. Cumulative unrecorded future income taxes payable amounted to \$6 million at December 31, 2002 (2001 — \$13 million and 2000 — \$17 million).

<sup>(2)</sup> In 2001, NOVA Chemicals recorded a \$58 million gain (\$44 million after-tax) related to a settlement with the IRS.

<sup>(3)</sup> As a result of Canadian federal and provincial tax rate reductions in 2001 and 2000, income tax rates on future tax liabilities have been reduced.

The principal temporary difference in calculating future income taxes, for both cost-of-service and non-cost-of-service operations, relates to deductions for tax purposes in respect of plant, property and equipment in excess of depreciation provided for in the accounts. Future tax liabilities resulting from these temporary differences have been reduced by the tax benefits associated with unused tax losses.

The following table outlines the income tax (recovery) expense arising from Canadian and Foreign operations:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Income (loss) before income taxes			
Canadian	\$(35)	\$ (19)	\$402
Foreign	(59)	(192)	31
	\$(94)	\$(211)	\$433
Current income tax (recovery) expense			
Canadian	\$(17)	\$ (46)	\$ 25
Foreign	(4)	(33)	13
	(21)	(79)	38
Future income tax (recovery) expense			
Canadian	19	18	77
Foreign	(11)	(22)	16
	8	(4)	93
Total income tax (recovery) expense	\$(13)	\$ (83)	\$131

## 19. CHANGES IN NON-CASH WORKING CAPITAL

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Accounts receivable	\$113	\$ 89	\$(225)
Inventories	(42)	254	(153)
Accounts payable and accrued liabilities	125	(180)	54
Changes in non-cash working capital	196	163	(324)
Reclassification and other items not having a cash effect	(1)	(1)	(123)
Changes in non-cash working capital having a cash effect	\$195	\$ 162	\$(447)
These changes relate to the following activities:			
Operating	\$206	\$ 184	\$(260)
Investing	—	(16)	(186)
Financing	(11)	(6)	(1)
Decrease (increase) in working capital	\$195	\$ 162	\$(447)

### *Interest and Income Tax Payments*

Third-party interest payments were \$86 million in 2002 (2001 – \$108 million and 2000 – \$106 million). Income tax payments (receipts) were \$(176) million in 2002 (2000 – \$(13) million and 2000 – \$207 million).

## 20. EMPLOYEE FUTURE BENEFITS

### *Pension Plans*

NOVA Chemicals sponsors both defined benefit and defined contribution pension arrangements.

Defined benefit pensions at retirement are mainly related to years of service and remuneration during the last years of employment and are partially indexed to inflation for some plans. Actuarial reports are prepared regularly by independent actuaries for accounting and funding purposes. The Corporation funds the plans using a valuation based on the projected unit credit method and the plans' assets consist primarily of publicly traded equity and fixed income securities. Plan assets are measured at fair value, while pension obligations are discounted using current yield rates of bonds with terms to maturity that approximate the duration of the Corporation's pension liabilities.

Pension and post-retirement expense (included in operating and selling, general and administrative costs) for all significant plans consisted of the following:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	PENSION PLANS			POST-RETIREMENT PLANS		
	2002	2001	2000	2002	2001	2000
Current service cost	\$ 16	\$ 17	\$ 13	\$ 2	\$ 1	\$ 1
Interest cost on projected benefit obligations	25	26	21	3	3	3
Expected return on plan assets	(26)	(25)	(22)	—	—	—
Prior service cost	2	2	—	—	—	—
Actuarial loss	1	—	—	—	—	—
Amortization of transition obligation	(5)	(4)	(4)	—	—	—
Amortization of settlement/curtailment (gain)/loss	—	1	(4)	—	—	—
Net total of other components	—	1	—	1	2	1
Net expense	\$ 13	\$ 18	\$ 4	\$ 6	\$ 6	\$ 5

The status of all significant defined benefit pension and post-retirement plans is as follows:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	PENSION PLANS			POST-RETIREMENT PLANS		
	2002	2001	2000	2002	2001	2000
Change in benefit obligations						
Benefit obligation at beginning of year	\$ 388	\$372	\$286	\$ 50	\$ 38	\$ 31
Current service cost	16	17	13	2	1	1
Interest cost	25	26	21	3	3	3
Experience (gain) loss	(1)	9	28	—	10	6
Plan amendments	1	—	9	—	—	—
Business combination <sup>(1)</sup>	2	—	45	—	—	—
Settlement/curtailment <sup>(2)</sup>	(1)	—	(7)	—	—	—
Special termination benefits	—	2	—	—	1	—
Employee contributions	9	2	2	—	—	—
Benefits paid	(19)	(21)	(14)	(2)	(2)	(2)
Foreign currency exchange rate changes	10	(19)	(11)	—	(1)	(1)
Net benefit obligation at end of year	\$ 430	\$388	\$372	\$ 53	\$ 50	\$ 38
Change in plan assets						
Fair value of plan assets at beginning of year	\$ 329	\$357	\$300	\$ —	\$ —	\$ —
Actual return on plan assets	(28)	3	38	—	—	—
Employer and employee contributions	22	10	10	—	—	—
Business combination <sup>(1)</sup>	—	—	43	—	—	—
Settlement/curtailment <sup>(2)</sup>	(1)	—	(7)	—	—	—
Benefits paid	(19)	(21)	(14)	—	—	—
Foreign currency exchange rate changes	9	(18)	(11)	—	—	—
Net total of other components	—	(2)	(2)	—	—	—
Fair value of plan assets at end of year	\$ 312	\$329	\$357	\$ —	\$ —	\$ —
Funded status						
Plan assets in excess (deficiency) of benefit obligation	\$(118)	\$ (59)	\$ (15)	\$(53)	\$(50)	\$(38)
Unrecognized net transitional (asset) obligation	(44)	(48)	(55)	10	10	12
Unrecognized prior service cost	8	9	9	—	—	—
Unrecognized net actuarial loss	105	49	22	13	14	5
Net amounts recognized in the consolidated balance sheets	\$ (49)	\$ (49)	\$ (39)	\$(30)	\$(26)	\$(21)
Assumptions as at December 31						
Discount rate	6.4%	6.4%	7.0%	6.8%	7.0%	7.3%
Assumed long-term rate of return on plan assets	7.7%	7.8%	7.5%	—	—	—
Rate of increase in future compensation	3.1%	3.8%	4.5%	3.7%	3.0%	4.3%
Long-term health care inflation <sup>(3)</sup>	—	—	—	5.0%	4.8%	4.7%

<sup>(1)</sup> The benefit obligations and plan assets assumed in the Shell acquisition are reflected beginning in 2000.

<sup>(2)</sup> Effective January 1, 2000, NOVA Chemicals offered a defined contribution arrangement to its Canadian employees. Employees could opt to convert their defined pension benefits accumulated under certain Canadian plans to the new defined contribution option on an irrevocable basis. This change was accounted for as a settlement of a portion of the defined benefit arrangements.

<sup>(3)</sup> Ultimate trend rate, expected to be achieved in 2010. The assumed health care cost trend rate used to measure the 2003 expected cost of benefits covered by the plans is approximately 10%.

NOVA Chemicals maintains multiple pension plans including several plans for which accumulated benefit obligations exceed the fair value of assets. The accumulated benefit obligations and the fair value of assets for these plans were \$426 million and \$308 million, respectively, at December 31, 2002 (2001 – \$305 million and \$246 million, respectively and 2000 – \$63 million and \$30 million, respectively).

#### *Post-Retirement Benefits Other Than Pensions*

The Corporation provides medical care and life insurance benefits to eligible retirees and their dependents in North America. The Corporation accrues the cost of providing post-retirement benefits as the employees provide services. Post-retirement costs are funded as they are incurred.

A 1% increase in the health care inflation rate would have increased the accumulated post-retirement benefit obligation by an additional \$2 million at December 31, 2002 for Canadian plans and \$5 million for U.S. plans. A 1% decrease in the same health care inflation rate would have decreased the post-retirement benefit obligation by \$2 million and \$4 million for Canadian and U.S. plans, respectively.

#### *Defined Contribution Arrangements*

NOVA Chemicals has a number of defined contribution arrangements providing pension benefits to certain groups of employees. The total expense for the Corporation's contribution to these plans in 2002 was \$6 million (2001 – \$6 million and 2000 – \$7 million).

## **21. CONTINGENCIES AND COMMITMENTS**

Various lawsuits and claims are pending by and against the Corporation. It is the opinion of management that final determination of these claims will not materially affect the financial position or operating results of the Corporation.

The Corporation leases office space, railcar and other equipment under various operating leases. The minimum lease payments are approximately \$536 million in total with annual amounts of \$41 million in 2003, \$40 million in 2004, \$37 million in 2005, \$35 million in 2006, \$33 million in 2007, and \$350 million thereafter. Rental expense under operating leases in 2002 was \$55 million (2001 – \$58 million and 2000 – \$49 million).

The Corporation has entered into agreements for the purchase of minimum amounts of feedstock and other raw materials for short- and long-term supply. The resulting obligations, based on year-end market prices, are approximately \$6,650 million in total with annual amounts of \$1,477 million in 2003, \$642 million in 2004, \$643 million in 2005, \$640 million in 2006, \$508 million in 2007, and \$2,740 million thereafter.

In addition to the future site clean-up and restoration costs which have been accrued (Notes 8 and 10), costs will be incurred in the future for plant sites when they are sold or are no longer used in the Corporation's operations. The liability with respect to these costs is estimated to be approximately \$59 million.



## 22. SEGMENTED INFORMATION

The Corporation determines its reportable segments based on the structure of its operations, which are primarily focused in two principal business segments — olefins/polyolefins and styrene/polystyrene (styrenics). These operations involve the production and marketing of ethylene and polyethylene resins, and styrene monomer and styrenic polymers, respectively.

### *Financial Information by Business Segment*

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Revenue			
Olefins and polyolefins	\$1,930	\$2,014	\$2,228
Styrenics	1,305	1,314	1,866
Intersegment eliminations	(144)	(134)	(178)
	\$3,091	\$3,194	\$3,916
Depreciation			
Olefins and polyolefins	\$ 166	\$ 132	\$ 86
Styrenics	100	98	102
	\$ 266	\$ 230	\$ 188
Operating income (loss)			
Olefins and polyolefins	\$ 67	\$ 57	\$ 439
Styrenics	(118)	(225)	93
Restructuring charges	(20)	(27)	(118)
	\$ (71)	\$ (195)	\$ 414
Net income (loss)			
Olefins and polyolefins	\$ (5)	\$ (2)	\$ 258
Styrenics	(102)	(181)	42
Equity investments	5	11	23
Other	21	44	(21)
	\$ (81)	\$ (128)	\$ 302
Plant, property and equipment additions			
Olefins and polyolefins	\$ 43	\$ 125	\$ 401
Styrenics	28	43	39
	\$ 71	\$ 168	\$ 440
DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Assets			
Olefins and polyolefins	\$1,923	\$1,960	\$2,198
Styrenics	1,643	1,638	1,937
Investment in Methanex	399	397	400
Corporate and other <sup>(1)</sup>	189	364	219
	\$4,154	\$4,359	\$4,754

<sup>(1)</sup> Amounts include all cash and cash equivalents.

### Financial Information by Geographic Area

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Revenue <sup>(1)</sup>			
Canada	\$1,081	\$1,236	\$1,318
United States	1,410	1,408	1,805
Europe and other	600	550	793
	\$3,091	\$3,194	\$3,916
Export sales from Canadian operations			
United States	\$ 748	\$ 694	\$ 801
Europe and other	113	137	206
	\$ 861	\$ 831	\$1,007
Operating income (loss) <sup>(2)</sup>			
Canada	\$ 11	\$ (75)	\$ 409
United States	(85)	(31)	(4)
Europe and other	3	(89)	9
	\$ (71)	\$ (195)	\$ 414
Equity in earnings of affiliates			
Canada	\$ 5	\$ 14	\$ 32
DECEMBER 31 (MILLIONS OF DOLLARS)			
Assets <sup>(2)</sup>			
Canada	\$2,055	\$2,237	\$2,467
United States	1,090	1,189	1,242
Europe and other	583	520	578
Investments	426	413	467
	\$4,154	\$4,359	\$4,754

(1) Based on location of customer.

(2) Based on location of the operating facilities.

## 23. FINANCIAL INSTRUMENTS

### Financial Instrument Fair Values

Financial instrument fair values represent a reasonable approximation of amounts NOVA Chemicals would have received or paid to counterparties to unwind positions prior to their maturity. NOVA Chemicals has no plans to unwind these positions prior to maturity and has no significant exposure to any individual customer or counterparty.

The carrying amounts reported on the balance sheets for cash and cash equivalents, accounts receivable, bank loans, and accounts payable and accrued liabilities approximate their fair value. Fair values and carrying amounts for long-term debt are as follows:

DECEMBER 31 (MILLIONS OF DOLLARS)	CARRYING AMOUNT			ESTIMATED FAIR VALUE <sup>(1)</sup>		
	2002	2001	2000	2002	2001	2000
Long-term debt <sup>(2)</sup>	\$1,212	\$1,508	\$1,423	\$1,134	\$1,410	\$1,389

(1) The fair value of long-term debt is based on quoted market prices, where available. If market prices are not available, fair values are estimated using discounted cash flow analyses, based on NOVA Chemicals' current incremental borrowing rates for similar borrowing arrangements.

(2) Includes debt installments due within one year.

*Foreign Exchange Risk Management*

NOVA Chemicals has U.S., Canadian and European-based petrochemical operations. As a result, a portion of the Corporation's expenditures are incurred in Canadian dollars. NOVA Chemicals manages its exposure to fluctuations in the Canadian/U.S. dollar exchange rate by using forward exchange contracts.

The outstanding forward contracts to deliver U.S. dollars and receive Canadian dollars are as follows:

DECEMBER 31 (MILLIONS OF DOLLARS, UNLESS OTHERWISE NOTED)	2002	2001	2000
Foreign exchange forwards			
Notional amount	\$ 100	\$ 640	\$1,235
Average exchange rate per Cdn dollar	\$0.70	\$0.70	\$ 0.70
Estimated fair value <sup>(1)</sup>	\$ (13)	\$ (86)	\$ (108)
Carrying value (see Notes 8 and 10)	\$ (3)	\$ (19)	\$ (57)

<sup>(1)</sup> Unrealized loss. The fair values of these instruments are estimated based on quoted market prices of comparable contracts, adjusted for maturity differences.

Effective December 31, 1999 the Corporation changed its functional currency to the U.S. dollar. The underlying U.S. dollar exposure originally being hedged by forward contracts then in place no longer existed. As a result, at December 31, 1999, the Corporation wrote off the estimated fair value of these hedges, represented by the difference between the average contracted (74¢) and average forward (70¢) exchange rates on the hedging contracts in the program. This resulted in a \$95 million before-tax (\$60 million after-tax) charge to earnings in 1999 and the recording of a deferred credit on the balance sheet (see Notes 8 and 10).

Effective January 1, 2000, NOVA Chemicals redesignated its forward contracts as hedges of Canadian dollar costs. The hedged rates equal the forward rates as of December 31, 1999 and average one Canadian dollar = U.S. 70¢ over the hedging period, which extends to March 2003.

*Commodity Price Risk Management*

NOVA Chemicals uses commodity-based derivatives to hedge a portion of its exposure to price fluctuations on crude oil, refined products and natural gas transactions. The instruments are used to moderate the risk of adverse short-term price movements. Occasionally, longer-term positions will be taken to manage price risk for anticipated supply requirements.

At December 31, 2002, 2001, and 2000, the notional volume and estimated fair value of outstanding derivative contracts for natural gas are as follows:

DECEMBER 31		2002	2001	2000
<b>Pricing swaps</b>				
Notional volume	GJ millions	<b>3.2</b>	12.0	15.2
Weighted-average price per GJ	Cdn.	<b>\$ 5.92<sup>(2)</sup></b>	\$6.89 <sup>(2)</sup>	\$1.84 <sup>(3)</sup>
Estimated fair value <sup>(1)</sup>	U.S. millions	<b>\$ (2)</b>	\$ 21	\$ 34
Carrying value	U.S. millions	<b>\$ —</b>	\$ —	\$ —
Term to maturity	Months	<b>1-10</b>	1-10	1-12
<b>Basis swaps</b>				
Notional volume	mcf millions	<b>113.0</b>	3.0	19.8
Weighted-average basis differential per mcf	U.S.	<b>\$ 0.47<sup>(4)</sup></b>	\$0.02 <sup>(4)</sup>	\$0.35 <sup>(5)</sup>
Estimated fair value <sup>(1)</sup>	U.S. millions	<b>\$ (10)</b>	\$ (1)	\$ 3
Carrying value	U.S. millions	<b>\$ —</b>	\$ —	\$ —
Term to maturity	Months	<b>1-34</b>	1-10	1-12
<b>Options</b>				
Notional volume—calls	mcf millions	<b>1.1</b>	20.5	19.2
Notional volume—puts	mcf millions	<b>68.1</b>	36.6	—
Weighted-average price per mcf—calls	U.S.	<b>\$ 4.10</b>	\$4.93	\$7.48
Weighted-average price per mcf—puts	U.S.	<b>\$ 2.32<sup>(6)</sup></b>	\$2.67	—
Estimated fair value <sup>(1)</sup>	U.S. millions	<b>\$ (1)</b>	\$ 6	\$ 36
Carrying value	U.S. millions	<b>\$ —</b>	\$ —	\$ —
Term to maturity	Months	<b>1-34</b>	1-22	1-3

(1) Unrealized gain (loss).

(2) The Corporation pays floating prices and receives fixed prices from the counterparty.

(3) The Corporation pays fixed prices and receives floating prices from the counterparty.

(4) The Corporation will pay or receive the difference between the NYMEX market price and the U.S. export market price, plus a fixed differential established in the contract.

(5) The Corporation will pay or receive the difference between the market price for intra-Alberta gas delivery and the export market price, less a fixed differential established in the contract.

(6) The Corporation will pay the difference between the NYMEX market price and the contract price (if lower than market).

At December 31, 2002, 2001 and 2000, the notional volume and estimated fair value of outstanding derivative contracts for crude oil, refined products, and alternative feedstock are as follows:

DECEMBER 31		2002	2001	2000
Notional volume	bbls millions	<b>13.8</b>	10.8	4.8
Weighted-average price per bbl <sup>(1)</sup>	U.S.	<b>\$29.84</b>	\$29.05	\$26.97
Estimated fair value <sup>(2)</sup>	U.S. millions	<b>\$ 8</b>	\$ (4)	\$ 6
Carrying value	U.S. millions	<b>\$ —</b>	\$ —	\$ —
Term to maturity	Months	<b>1-48</b>	1-60	1-12

(1) Crude oil swaps, options, collars.

(2) Unrealized gain (loss).



In 2002, NOVA Chemicals liquidated certain natural gas option positions used in collar-based hedging strategies that were in place to manage the cost of the Corporation's natural gas feedstock supply, resulting in a pre-tax gain of \$17 million. The gain has been deferred on the balance sheet (see Notes 8 and 10) and will be recognized in income over the remaining terms of the related feedstock purchase commitments, from January 2003 to March 2005.

#### *Interest Rate Risk Management*

NOVA Chemicals periodically enters into interest rate swap agreements to manage its interest rate price risk exposure on certain fixed-rate debt. The agreements generally involve the receipt of fixed-rate amounts in exchange for floating-rate LIBOR based payments over the terms of the related debt. In 2002, a series of interest rate swaps on \$550 million (2001 – \$650 million and 2000 – \$nil) of fixed-rate debt were liquidated, resulting in pre-tax gains of \$13 million (2001 – \$27 million and 2000 – \$nil). The gains have been deferred and will be recognized in income as a reduction of interest expense over the terms of the related debt instruments, which mature in 2005, 2006 and 2009 (see Note 10). At December 31, 2002, no interest rate swaps are outstanding.

#### *Credit Risk Management*

Credit exposure on financial instruments arises from the possibility that a counterparty to an instrument in which NOVA Chemicals is entitled to receive payment of an unrealized gain fails to perform. NOVA Chemicals only transacts with counterparties having a minimum credit rating of A for its foreign exchange and interest rate instruments and a minimum credit rating of BBB for its commodity risk management instruments. A limit on contingent exposure has been established for each counterparty based on the counterparty's credit rating. Credit exposure is managed through credit approval and monitoring procedures. NOVA Chemicals does not anticipate any counterparties that it currently transacts with will fail to meet their obligations. At December 31, 2002, 2001, and 2000, NOVA Chemicals' credit exposure was \$nil for foreign currency and interest rate instruments, and \$4 million (2001 – \$27 million and 2000 – \$89 million) for commodity-based instruments.

Concentration of credit risk relates primarily to the Corporation's receivables, as certain customer groups are located in the same geographic area and operate in the same industry. The Corporation manages its credit risk relating to these receivables through credit approval and monitoring procedures.

## 24. UNITED STATES GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

### *Reconciliation to Accounting Principles Generally Accepted in the United States*

The Corporation prepares its consolidated financial statements in accordance with Canadian GAAP, which, in some respects, are different from those used in the United States. The effect of these differences on the Corporation's consolidated net income (loss) and balance sheet are as follows:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Net income (loss) in accordance with Canadian GAAP	\$ (81)	\$ (128)	\$ 302
Add (deduct) adjustments for:			
Start-up costs <sup>(1)</sup>	3	(11)	(6)
Foreign exchange derivative instruments and hedging activity <sup>(2)</sup>	15	14	(31)
Other derivative instruments and hedging activity <sup>(2)</sup>	5	10	—
Future income taxes <sup>(3)</sup>	—	29	(29)
Inventory costing <sup>(4)</sup>	1	(2)	6
Preferred securities distributions <sup>(5)</sup>	(23)	(23)	(23)
Equity in earnings (losses) of affiliates <sup>(6)</sup>	(4)	1	(10)
Other	1	1	2
Net income (loss) in accordance with U.S. GAAP	\$ (83)	\$ (109)	\$ 211
Earnings (loss) per share using U.S. GAAP			
— Basic	\$ (1.05)	\$ (1.39)	\$ 2.23
— Diluted	\$ (1.05)	\$ (1.39)	\$ 2.14
Comprehensive income (loss) (net of tax (expense) recovery) <sup>(7)</sup>			
Net income (loss) in accordance with U.S. GAAP	\$ (83)	\$ (109)	\$ 211
Unrealized foreign exchange gains (losses) on translation of self-sustaining foreign operations (less tax of \$nil, \$nil and \$nil)	70	(140)	(88)
Fair value of cash flow hedging instruments (less tax of \$(15) and \$17) <sup>(2)</sup>	26	(30)	—
Equity in comprehensive income (loss) of affiliates (less tax of \$(1) and \$1) <sup>(6)</sup>	7	(4)	—
Minimum pension liability (less tax of \$1)	(1)	—	—
Comprehensive income (loss) in accordance with U.S. GAAP	\$ 19	\$ (283)	\$ 123
Accumulated other comprehensive loss <sup>(7)</sup>			
Unrealized foreign exchange losses on translation of self-sustaining foreign operations	\$ (130)	\$ (200)	\$ (60)
Fair value of cash flow hedging instruments <sup>(2)</sup>	(4)	(30)	—
Equity in comprehensive income (loss) of affiliates <sup>(6)</sup>	3	(4)	—
Minimum pension liability <sup>(9)</sup>	(1)	—	—
Accumulated other comprehensive loss	\$ (132)	\$ (234)	\$ (60)
DECEMBER 31 (MILLIONS OF DOLLARS)	2002	2001	2000
Balance sheet items in accordance with U.S. GAAP			
Current assets <sup>(2) (4) (8)</sup>	\$ 626	\$ 716	\$ 1,108
Investments and other assets <sup>(1) (6) (9)</sup>	492	496	412
Plant, property and equipment (net) <sup>(1)</sup>	3,007	3,131	3,267
Current liabilities <sup>(2) (8)</sup>	(577)	(725)	(765)
Long-term debt <sup>(2)</sup>			
Preferred securities <sup>(5)</sup>	(383)	(383)	(383)
Other long-term debt	(1,234)	(1,323)	(1,406)
Deferred credits <sup>(2) (3) (9)</sup>	(790)	(771)	(782)
Retractable preferred shares	(198)	(198)	(198)
Common shareholders' equity	\$ 943	\$ 943	\$ 1,253

- (1) **Start-up Costs** ~ Canadian GAAP provides that when an entity starts up a new facility, expenditures incurred during the pre-operating period may be deferred when certain criteria are met. Under U.S. GAAP, all costs (except interest on constructed assets) associated with start-up activities must be expensed as incurred. See Note 6 for information on the Corporation's start-up costs.
- (2) **Derivative Instruments and Hedging Activities** ~ Canadian GAAP does not require the recognition of derivative instruments on the consolidated balance sheet at fair values. Under U.S. GAAP, entities must follow the recommendations of Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Hedging Activities," which requires the recognition of all derivatives on the balance sheet at fair value. Derivatives that are not hedges must be adjusted to fair value through income. If the derivative is a hedge, depending on the nature of the hedge, changes in the fair value of derivatives will either be offset against the change in fair value of the hedged assets, liabilities, or firm commitments through earnings or recognized in other comprehensive income until the hedged item is recognized in earnings. For derivatives that are designated and qualify as hedging instruments, the Corporation documents the hedging strategy, including hedging instrument and hedged item, based on the risk exposure being hedged. Based upon the designated hedging strategy, effectiveness of the hedge in offsetting the hedged risk is assessed at inception and on an ongoing basis during the term of the hedge. The ineffective portion of a derivative's change in fair value is immediately recognized in earnings.
- The application of SFAS No. 133 for U.S. GAAP reporting results in differences related to foreign exchange, commodity-based and other derivative instruments used by the Corporation. For information regarding the Corporation's use of derivatives and hedging activities, see Note 23.
- (3) **Future Income Taxes** ~ Canadian GAAP permits recognition of the impact of changes in tax laws and rates on the measurement of future income tax assets and liabilities in the period in which the tax laws and rates are considered to be substantively enacted. Under U.S. GAAP rules, the impact of tax rate changes on future income tax assets and liabilities is only recognized on enactment of the change in tax law and rates.
- (4) **Inventory Costing** ~ Canadian GAAP allows fixed overhead costs associated with production activities to be expensed during the period, whereas U.S. GAAP requires an allocation of fixed production overhead to inventory.
- (5) **Compound Financial Instruments** ~ Canadian GAAP requires the classification and recording of a financial instrument, or its component parts, as a liability or equity in accordance with the substance of the contractual arrangements governing the instrument. U.S. GAAP requires that no portion of the proceeds from issuance of convertible debt securities be attributed to the conversion feature and classified as equity. Accordingly, the Corporation's preferred securities discussed in Note 11 are accounted for as debt under U.S. GAAP and the related distributions as interest expense.
- (6) **Equity in Earnings (Losses) of Affiliates** ~ NOVA Chemicals' share of adjustments to financial information and results of operations of equity investments to comply with U.S. accounting principles.
- (7) **Comprehensive Income** ~ U.S. GAAP SFAS No. 130, "Reporting Comprehensive Income," requires the presentation of a statement containing the components of comprehensive income and the accumulated balance of other comprehensive income. Comprehensive income includes all changes in equity during the period including items that are not in net income. This statement is not required under Canadian GAAP.
- (8) **Accounts Receivable Securitizations** ~ During 2001, the Canadian GAAP standard pertaining to accounting and reporting transfers of financial assets was amended to be substantially the same as the U.S. GAAP standard, SFAS No. 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities—a replacement of SFAS No. 125." Accordingly, in 2002 and 2001, the Corporation's Canadian accounts receivable securitization program qualified for off-balance sheet treatment for U.S. GAAP purposes. This program did not meet the off-balance sheet criteria in 2000.
- (9) **Minimum Pension Liability** ~ SFAS No. 87, "Employer's Accounting for Pensions," requires an employer to record an additional minimum liability (AML) if the unfunded accumulated benefit obligation exceeds the accrued pension liability or if there is a prepaid pension asset with respect to the plan. If an AML is recognized, an intangible asset, in an amount not exceeding the unrecognized prior service cost, is also recognized. The excess of the AML, over the intangible asset, if any, is charged to other comprehensive income, net of income tax effects. At December 31, 2002, an AML and an intangible asset, in the amount of \$8 million and \$6 million, respectively, have been recognized, resulting in a charge of \$1 million (net of tax) to other comprehensive income.

### *Other Disclosures*

**Stock-based Compensation** ~ SFAS No. 123, "Accounting for Stock-Based Compensation," defines a fair-value based method of accounting for employee stock options and encourages the use of this method to account for stock compensation plans. It does, however, permit an entity to continue to measure compensation cost using the intrinsic-value based method of accounting prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," (APB 25). Entities using the intrinsic-value method must disclose pro forma net income (loss) and earnings (loss) per share assuming the fair-value method had been applied. NOVA Chemicals has elected to follow APB 25 and related interpretations in accounting for employee stock options. Options are issued at the market price on date of grant and therefore, under APB 25, no compensation expense has been recorded.

The following table outlines the impact on the Corporation's U.S. GAAP results, had compensation expense for the stock option plan been determined based on the fair-value method as prescribed under SFAS No. 123:

YEAR ENDED DECEMBER 31 (MILLIONS OF DOLLARS, UNLESS OTHERWISE NOTED)	2002	2001	2000
Net income (loss)			
As reported	\$ (83)	\$(109)	\$211
Pro forma	\$ (94)	\$(115)	\$202
Earnings (loss) per share—basic			
As reported	\$(1.05)	\$(1.39)	\$2.23
Pro forma	\$(1.18)	\$(1.46)	\$2.13
Earnings (loss) per share—diluted			
As reported	\$(1.05)	\$(1.39)	\$2.14
Pro forma	\$(1.18)	\$(1.46)	\$2.05

### *U.S. Accounting Developments*

In January 2003, the Financial Accounting Standards Board (FASB) issued Interpretation No. 46, "Consolidation of Variable Interest Entities," which addresses consolidation requirements for interests in a variable interest entity. As qualifying special-purpose entities subject to the reporting requirements of SFAS No. 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities," are not subject to the provisions of the Interpretation, it is not anticipated that this Interpretation will have an impact on the Corporation's financial position upon adoption.

In November 2002, the FASB issued Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." The Interpretation elaborates on the existing disclosure requirements for most guarantees and requires that, at the time a company issues a guarantee, it must recognize an initial liability for the fair value of the obligations it assumes under the guarantee. The recognition and measurement provisions apply on a prospective basis to guarantees issued or modified after December 31, 2002. It is not anticipated that this Interpretation will have an impact on the Corporation's financial position upon adoption.

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," which addresses financial accounting and reporting for costs associated with exit or disposal activities. This Statement requires that a liability for costs associated with an exit or disposal activity be recognized when the liability is incurred, as opposed to at the date of an entity's commitment to an exit plan as under previous rules. SFAS No. 146 is effective for the Corporation's 2003 fiscal year. It is not anticipated that this Statement will have an impact on the Corporation's financial position upon adoption.

In June 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations." This statement requires the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of the fair value can be made. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset. The requirements are effective January 1, 2003 and, based on current circumstances, the Corporation expects that the existing site clean-up and restoration liability is adequate (see Notes 8 and 10).



## CORPORATE GOVERNANCE INFORMATION

The governance of NOVA Chemicals is the responsibility of the Board of Directors and is delivered by four committees of the Board and NOVA Chemicals' Executive Leadership Team, comprising senior management.

NOVA Chemicals has a long history of strong corporate governance. With NOVA Chemicals' increasing national and international development, and the globalization of the commodity chemical businesses, the directors and management have established forward-looking governance policies that are regularly evaluated and modified to ensure effectiveness.

NOVA Chemicals is aligned with the corporate governance guidelines of the Toronto Stock Exchange. The company is also aligned with the corporate governance rules recently passed by the Securities and Exchange Commission and the New York Stock Exchange.

The Board of Directors is responsible for making significant decisions regarding the business and affairs of NOVA Chemicals and establishes the overall policies and standards for the Corporation. The Board of Directors and the committees of the Board meet on a regularly scheduled basis. In addition, communications between the directors and management occur apart from regularly scheduled Board and committee meetings.

### COMMITTEES OF THE BOARD

#### *Audit, Finance and Risk*

This committee reviews and inquires into matters affecting the financial reporting of NOVA Chemicals, the system of internal accounting and financial controls and procedures and NOVA Chemicals' financial audit procedures and plans; recommends the approval of the issuance of debt securities; oversees the policies and practices of NOVA Chemicals relating to risk management strategies; recommends to the Board the appointment and remuneration of the external auditors and approves the mandate and appointment of internal auditors; is responsible for the proper and orderly funding, administration and investment of the trust funds associated with savings and profit sharing plans and pension plans; and reviews with management and reports to the Board, annually, on the financing plans and objectives of NOVA Chemicals. Members are: Messrs. Hawkins (Chairman), Dineen, Ludwick, Thompson and Mrs. Rennie.

### *Corporate Governance*

This committee is responsible for the composition, compensation and governance of the Board of Directors of NOVA Chemicals and recommends nominees for election or appointment as directors. This committee is also responsible for maintaining an effective working relationship between the Board of Directors and NOVA Chemicals' management. Members are: Messrs. Newall (Chairman), Blumberg, Bougie, Dineen, Fortier and Stanford.

### *Public Policy and Responsible Care*

This committee is responsible for overseeing the policies and practices of NOVA Chemicals relating to its Responsible Care audit and the environment, occupational health and safety, communications, corporate contributions, public policy matters and NOVA Chemicals' relationship with all of its stakeholders. Members are: Dr. Boer (Chairman) and Messrs. Bougie, Fortier, Ludwick, and Thompson and Mmes. Creighton and Rennie.

### *Human Resources*

This committee is responsible for overseeing policies and practices of NOVA Chemicals with respect to human resources. It reviews recommendations for senior executive appointments and the terms and conditions of their employment; as well as succession planning and compensation. It recommends awards under the Incentive Compensation Plan; the Equity Appreciation Plan and the Option Plan, and is also responsible

for the proper and orderly administration of NOVA Chemicals' savings, profit sharing and pension plans, other than matters relating to the funding and investment of the plans' trust funds. Members are: Mr. Stanford (Chairman), Dr. Boer, and Messrs. Blumberg, Hawkins and Mrs. Creighton.

The mandates of the Audit, Finance and Risk, Human Resources, Public Policy and Responsible Care, and Corporate Governance Committees are available on the NOVA Chemicals website at [www.novachemicals.com](http://www.novachemicals.com).

## **OTHER CORPORATE ACTIVITIES**

### *Technology Advisory Committee*

In 1996, a Technology Advisory Committee was created to advise NOVA Chemicals on its research strategy and programs. The Technology Advisory Committee consists of two NOVA Chemicals' directors, Dr. Boer and Mr. Blumberg (Co-Chairs); Mr. Christopher Pappas, Senior Vice President and President, Styrenics of NOVA Chemicals; Mr. Paul Clark (Co-Chair), Vice President, Research and Technology of NOVA Chemicals; Mr. Gerry Dyer, retired Research and Development Director, DuPont Canada Inc.; and three world-renowned research scientists: Dr. Musa Kamal, Professor, McGill University; Dr. Kurt Zilm, Professor, Yale University; and Dr. Robert Waymouth, Professor, Stanford University.

## EXECUTIVE LEADERSHIP TEAM

### Jeffrey M. Lipton

PRESIDENT AND CHIEF EXECUTIVE OFFICER

Jeff joined NOVA Corporation in 1994 as Senior Vice President and Chief Financial Officer and assumed his current position as President and Chief Executive Officer of NOVA Chemicals in 1998. Jeff also serves as Chairman of the Board for both Methanex Corporation and Trimeris, Inc. He is also a Director of Hercules Incorporated. Jeff is a Director, a member of the Executive Committee, and Chairman of the Finance and Membership Committee of the American Chemistry Council. He is also a member of the Canadian Council of Chief Executives. Jeff worked with E.I. DuPont for almost three decades, prior to joining NOVA Chemicals. He graduated from the Rensselaer Polytechnic Institute with a Bachelor of Chemical Engineering degree and obtained an MBA from Harvard University.

### Larry A. MacDonald

SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER

Larry joined NOVA Corporation of Alberta in 1979 as Controller. He progressed through several financial, information technology, and merger and acquisition positions within NOVA Corporation and NOVA Corporation of Alberta before assuming the role of Senior Vice President, Manufacturing East for NOVA Chemicals in 1999. He began his current role in December 2001. Larry graduated from the University of Windsor with a Bachelor of Commerce degree and is a Chartered Accountant.

### Jack S. Mustoe

SENIOR VICE PRESIDENT, LEGAL AND GENERAL COUNSEL

Jack joined NOVA Corporation of Alberta in 1988 as Vice President, General Counsel and Corporate Secretary and was named Senior Vice President, General Counsel and Corporate Environmental Officer of NOVA Corporation in 1994. Jack assumed his current position as Senior Vice President, Legal and General Counsel for NOVA Chemicals in 1998. Jack is also responsible for NOVA Chemicals' purchasing function. Prior to 1988, Jack served as Senior Legal Counsel for Dome Petroleum Ltd. and as Assistant General Counsel for Norcen Energy Resources Ltd. Jack graduated from the University of Western Ontario with a Bachelor of Laws degree and is a member of the Ontario and Alberta Bars.

### Sheila H. O'Brien, C.M.

SENIOR VICE PRESIDENT, HUMAN RESOURCES, PUBLIC AFFAIRS GOVERNMENT AND INVESTOR RELATIONS

Sheila was named to her current role with NOVA Chemicals in July 1998. She has held several senior management roles within NOVA Corporation and NOVA Corporation of Alberta since 1992, including Senior Vice President, Human Resources and Public Affairs, Vice President for People and Community, and Director, Public Affairs. Prior to 1992, she held managerial positions in Human Resources and Public Affairs at Amoco Canada Petroleum Co. Ltd. and Petro-Canada. She also held leadership positions in organizations in the public and not-for-profit sectors. Sheila holds a Bachelor of Arts degree in English and Sociology from the University of Calgary and is a graduate of the University of Western Ontario's Management Training Course. Sheila was appointed to the Order of Canada in 1998.

#### **Christopher D. Pappas**

SENIOR VICE PRESIDENT AND PRESIDENT, STYRENICS

Chris joined NOVA Chemicals in his current role in July of 2000. He began his career with Dow Chemical in 1978, where he held a variety of sales and managerial positions. He concluded his time at Dow as Commercial Director, Polyethylene/Specialty Plastics in 1995. From 1996 until 1998, Chris led the ethylene elastomers business of Dupont Dow Elastomers, Inc. as Vice-President. He was then named Commercial Vice-President with accountability for ethylene elastomers, neoprene, North American Sales and Marketing, and Supply Chain. Chris was President and Chief Executive Officer of Paint and Coatings.com just prior to joining NOVA Chemicals. He is a director of Methanex Corporation, a member of the American Plastics Council Operating Board, Chair of AIChE Industrial Advisory Board, and a director of WQED Public Television. Chris has a Bachelor of Science degree in Civil Engineering from The Georgia Institute of Technology and an MBA from The Wharton School of Business at The University of Pennsylvania.

#### **A. Terence Poole**

EXECUTIVE VICE PRESIDENT,  
CORPORATE STRATEGY AND DEVELOPMENT

Terry began his current role in 2000. Prior to this, he spent two years as Executive Vice President, Finance and Strategy for NOVA Chemicals. Terry has held several senior management roles within NOVA Corporation of Alberta and NOVA Corporation since 1988, including Senior Vice President and Chief Financial Officer; Senior Vice President, Controller and Treasurer; and Vice President and Controller. Terry also serves on the board of Methanex Corporation and Rentmaker. Prior to 1988, Terry held senior financial and operating management positions in the John Labatt group of companies and with Phillips Cables. Terry graduated from Dalhousie University with a Bachelor of Commerce degree and is a Chartered Accountant.

#### **Dale H. Spiess**

SENIOR VICE PRESIDENT AND PRESIDENT,  
OLEFINS/POLYOLEFINS

Dale began his current role in November of 2001. He joined NOVA Chemicals as Senior Vice President, Polyethylene Sales and Marketing in 1998. Prior to this, Dale was Group Vice President with Millennium Petrochemicals Inc. and also held positions with Northern Petrochemicals, ARCO Chemical and Uniroyal Chemical. Dale also serves as a director of the Flexible Packaging Association. Dale has a Bachelor of Science degree in Biology from Illinois Wesleyan University and is a graduate of the Executive Management Program at The University of Pennsylvania.

#### **John L. Wheeler**

SENIOR VICE PRESIDENT AND CHIEF INFORMATION OFFICER

John joined NOVA Chemicals in his current role in 1998. Prior to this, he held senior management positions in Information Technology at AT&T Co., Bristol-Myers Consumer Products, Viacom and PolyGram and was Director of Information Systems for W.R. Grace Specialty Chemicals Co. John graduated with a Bachelor of Arts degree in Political Science (Pre-Law) from Duke University.



## BOARD OF DIRECTORS

J. E. (Ted) Newall, O.C. is Chairman of the Board of Directors of NOVA Chemicals and, prior to July 1998, was Vice Chairman and Chief Executive Officer of NOVA Corporation. He has been a director of NOVA Chemicals, or its predecessor companies, NOVA Corporation and NOVA Corporation of Alberta, since August 1991. He is a director and Chairman of the Board of Canadian Pacific Railway, and is also a director of BCE Inc., Alcan Inc., Royal Bank of Canada, Maple Leaf Foods, McCain Capital Corporation and Bell Canada. Mr. Newall resides in Calgary, Alberta.

Jerald A. Blumberg has been a director of NOVA Chemicals since February 2000. He is Past President and Chief Executive Officer of Ambar, Inc., a private oilfield services company. Prior to January 1998, Mr. Blumberg held various international and management positions with E.I. DuPont de Nemours & Company, Inc., most recently as an Executive Vice President and member of the Office of the Chief Executive. He is a director of Burlington Industries, Inc., The Lubrizol Corporation, Rentmaker, and iServiceX.com. Mr. Blumberg resides in Houston, Texas.

Dr. F. Peter Boer has been a director of NOVA Chemicals, or its predecessor companies, NOVA Corporation and NOVA Corporation of Alberta, since February 1991. He resides in Boynton Beach, Florida. He is President and Chief Executive Officer of Tiger Scientific Inc., a firm specializing in science and technology consulting and investments. He is a director of Ensco, Inc., Laureate Biopharma LLC and Rhodes Technologies. Dr. Boer holds an A.B. in Physics from Princeton University and a Ph.D. in Chemical Physics from Harvard University.

Jacques Bougie, O.C. has been a director of NOVA Chemicals since June 2001. He resides in Iles-des-soeurs, Québec. He is Past President and Chief Executive Officer of Alcan Inc. Mr. Bougie held numerous other positions within Alcan beginning in 1979 until his retirement in 2001. Mr. Bougie currently serves on the board of McCain Foods Ltd., and has previously served on the boards of Royal Bank of Canada, Bell Canada and BCE Mobile Communications, Inc.

Joanne V. Creighton has been a director of NOVA Chemicals since June 2001. She resides in South Hadley, Massachusetts and is President and Professor of English of Mount Holyoke College. Prior to January 1996, Ms. Creighton was Interim President and Professor of English of Wesleyan University. She is a director of Five Colleges, Inc., the Consortium on the Financing of Higher Education, College Compact, the Women's College Coalition and the Economic Council of Western Massachusetts.

Robert E. Dineen, Jr. has been a director of NOVA Chemicals since July 1998. He resides in New York, New York and is a partner of Shearman & Sterling, Attorneys-at-Law, New York, New York. Mr. Dineen is a director of Manulife Financial Corporation and Resources for Children with Special Needs, Inc.

L. Yves Fortier, C.C., Q.C. has been a director of NOVA Chemicals since July 1998. He resides in Westmount, Québec and is Chairman and a senior partner of Ogilvy Renault, Barristers and Solicitors, Montréal, Québec. He is Governor and director of Hudson's Bay Company, Chairman and director of Alcan Inc., and a director of DuPont Canada Inc., Northern Telecom Limited, Royal Bank of Canada and Groupe TVA Inc.

Kerry L. Hawkins has been a director of NOVA Chemicals since July 1998. He resides in Winnipeg, Manitoba and is President of Cargill Limited, and Chief Executive Officer of Canadian Operations for Cargill. He is also Chairman of Prince Rupert Grain, Saskferco Products Inc. and Cascadia Terminal. He is the Founding Chairman of the Business Council of Manitoba and a director of TransCanada PipeLines Limited, Shell Canada Limited, Hudson's Bay Company, Canadian Council of Chief Executives, C.D. Howe and the Chamber of Maritime Commerce.

Jeffrey M. Lipton has been a director of NOVA Chemicals, or its predecessor company, NOVA Corporation, since April 1996. He is President and Chief Executive Officer of NOVA Chemicals and resides in Sewickley, Pennsylvania. Mr. Lipton serves as Chairman of the Board for both Methanex Corporation and Trimeris, Inc. He is also a director of Hercules Incorporated. Mr. Lipton is a Director, a member of the Executive Committee, and Chairman of the Finance and Membership Committee of the American Chemistry Council. He is also a member of the Canadian Council of Chief Executives.

Arnold M. Ludwick has been a director of NOVA Chemicals since February 2000. Until December 2002, he was Deputy Chairman of Claridge Inc. and prior to 1999 was President and Chief Executive Officer of Claridge and a Vice President of The Seagram Company Ltd. He resides in Montréal, Québec.

Janice G. Rennie, F.C.A. has been a director of NOVA Chemicals, or its predecessor companies, NOVA Corporation and NOVA Corporation of Alberta, since April 1991. She is Vice Chair of EPCOR Utilities Inc. and a director of EPCOR Preferred Equity Inc., Tire-Ex Supply Ltd., Rocky Mountain Air Compressors Ltd. and Matrikon Inc. She is also a Trustee of Canadian Hotel Income Properties. Ms. Rennie resides in Edmonton, Alberta, where she is Principal of Rennie & Associates.

James M. Stanford has been a director of NOVA Chemicals since December 1999. He is President of Stanford Resource Management, Inc., and retired President, Chief Executive Officer and director of Petro-Canada (1993-2000) and President and Chief Operating Officer (1990-1993). Mr. Stanford is a director of EnCana Corporation, Inco Limited, B.C. Gas Inc., OMERS Resources, Iogen Corporation, Sunfire Energy Corporation, OPTI Canada Inc., and serves as Chairman of Sustainable Development Technology Canada. He resides in Calgary, Alberta.

Joseph D. Thompson has been a director of NOVA Chemicals since July 1998. He is Chairman of PCL Construction Group Inc. Prior to July 1998, Mr. Thompson was Chairman, President and Chief Executive Officer of PCL Construction Group Inc. He is also a director of TransCanada PipeLines Limited, Shana Corporation, Jonan Enterprises Ltd. and PCL Employee Holdings Ltd. He resides in Edmonton, Alberta.



## RESPONSIBLE CARE® INFORMATION

### *What is Responsible Care?*

Responsible Care is an initiative developed by the chemical industry to improve performance in environmental protection, health and safety. Responsible Care has been a core value of the chemical industry since its beginnings in Canada, in 1985, the initiative now extends to over 47 countries. The principles of Responsible Care help the industry to provide a clear understanding of the value our products bring to society, the risks associated with these products and how we reduce these risks to acceptable levels.

### *NOVA Chemicals' Responsible Care Vision*

We will be a leader in the chemical industry worldwide, in terms of our performance and commitment to Responsible Care. Our ultimate goal is to operate our businesses without harm to people, property and the environment.

NOVA Chemicals believes that Responsible Care makes good business sense, and we have been a Responsible Care company since its inception. We strive to operate with zero incidents and work to ensure our products are safely manufactured, safe to use and effectively managed throughout their lifecycle.

### *Worker Safety and Health*

NOVA Chemicals operates on the premise that all work-related illnesses and injuries can be prevented. Our safety programs are designed to protect employees and contractors from both immediate, on-the-job and long-term health risks.

### *The Lifecycle of Our Products*

By working closely with our customers, suppliers and carriers, NOVA Chemicals fosters responsible management of its products through their lifecycles. Our product stewardship program consists of activities such as ensuring compliance with product regulations and advising customers on the safe handling of our products. We also work with all the major chemical industry trade associations to manage issues confronting our industry.

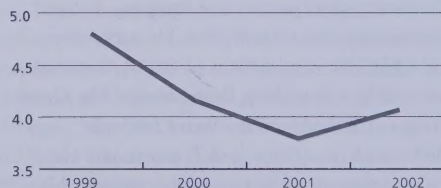
### *A Corporate Neighbor of Choice*

Reaching out to the community, NOVA Chemicals wants to understand and respond to the concerns of local communities and residents. As a chemical manufacturer, it is imperative that we share information about our facilities, operations and products. The measures we take to protect workers, neighbors and the environment are all part of our efforts to be a "neighbor of choice."

### *The Environment—Ours to Preserve and Protect*

At NOVA Chemicals, we are committed to minimizing our impact on the environment. The chart below is an overview of estimated hydrocarbon emissions for the last four years. During the period 1999–2002, net productive capacity increased by 7.1 billion pounds, or 72%, while hydrocarbon emissions were reduced by 15% over the same period.

NOVA Chemicals'  
Estimated Hydrocarbon Emissions  
(in metric tonnes)



### *Additional Information*

NOVA Chemicals has a Responsible Care annual report that details information on our broad slate of Responsible Care performance measures. You can access our current report at [www.novachemicals.com](http://www.novachemicals.com) or call our Responsible Care group at 412-490-4040 to request a copy.

## INVESTOR INFORMATION

### *Annual Meeting*

Shareholders are invited to attend NOVA Chemicals' annual meeting on May 15, 2003, at 10:30 a.m. at The Fairmont Palliser Hotel in Calgary, Alberta.

### *Shareholder Information*

For inquiries on stock-related matters, including dividend payments, stock transfers and address changes, contact NOVA Chemicals toll-free at 1-800-661-8686, Monday through Friday, from 8 a.m. to 5 p.m., Mountain Time or via e-mail to: [shareholders@novachem.com](mailto:shareholders@novachem.com)

### *Transfer Agent and Registrar*

CIBC Mellon Trust Company  
600 The Dome Tower  
333 Seventh Avenue S.W.  
Calgary, Alberta, Canada T2P 2Z1  
Phone: (403) 232-2400  
Toll-free: 1-800-387-0825  
Fax: (403) 264-2100  
Internet: [www.cibcmellon.ca](http://www.cibcmellon.ca)  
E-mail: [inquiries@cibcmellon.ca](mailto:inquiries@cibcmellon.ca)

### *Non-Resident Investors*

Dividends paid to non-resident shareholders are subject to Canadian withholding tax, generally at the rate of 15% for the United States and other countries where Canadian tax treaties apply, and 25% for non-treaty countries. Certain exemptions or refunds may be available to residents of the United States and other countries where Canadian tax treaties apply. Please consult your tax advisor for more information.

### *Share Registration*

NOVA Chemicals' common shares are listed on the New York and Toronto Stock Exchanges under the trading symbol "NCX." On December 31, 2002, approximately 87 million common shares were outstanding and there were an estimated 14,300 registered shareholders. NOVA Chemicals' common shares are transferable at the Vancouver, Calgary, Regina, Winnipeg, Toronto, Montréal and Halifax offices of CIBC Mellon Trust Company. The common shares are also transferable at Mellon Investor Services LLC, New York, New York.

### *Rapports annuels en français*

On peut obtenir un exemplaire de ce rapport en français auprès du service des affaires publiques ou du service des relations avec les investisseurs au (403) 750-3600 au (412) 490-4000.

### *Requests for Additional Information*

For copies of NOVA Chemicals' quarterly reports, or additional copies of this annual report, contact NOVA Chemicals at (403) 750-3600, (412) 490-4000 or via e-mail to [publications@novachem.com](mailto:publications@novachem.com)

### *How to contact NOVA Chemicals*

P.O. Box 2518  
645 Seventh Avenue S.W.  
Calgary, Alberta, Canada T2P 5C6  
Telephone: (403) 750-3600 or  
Telephone: (412) 490-4000  
Internet: [www.novachemicals.com](http://www.novachemicals.com)  
E-mail: [invest@novachem.com](mailto:invest@novachem.com)


### *Public Affairs and Investor Relations*

1-866-ASK-NOVA ~ Pittsburgh

### *Shareholder Relations*

1-800-661-8686 ~ Calgary

## TRADEMARKS

 NOVA Chemicals® and NOVAPOL® are registered trademarks of NOVA Brands Ltd.; authorized use/utilisation autorisée.

Advanced SCLAIRTECH™; NOVACAT™ T; SCLAIRTECH™; and SCLAIR ASTute™ are trademarks of NOVA Chemicals.

ARCEL®, DYLARK®, DYLITE®, NAS®, and ZYNTAR® are registered trademarks of NOVA Chemicals Inc.

SCLAIR® is a registered trademark of NOVA Chemicals Corporation in Canada and of NOVA Chemicals (International) S.A. elsewhere; authorized use/utilisation autorisée.

STYROSUN® is a registered trademark of NOVA Chemicals Inc. in the United States and Mexico and of NOVA Chemicals (International) S.A. elsewhere.

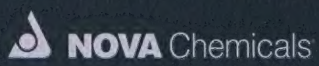
ULTRA LOW™ is a trademark of NOVA Chemicals Inc.

INNOVENE® is a registered trademark of BP plc.

Responsible Care® is a registered trademark of the Canadian Chemical Producers' Association in Canada and is a registered service mark of the American Chemistry Council in the United States.

SAP® is a registered trademark of SAP AG.





[www.novachemicals.com](http://www.novachemicals.com)